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DEPARTMENTS OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT AND INDEPENDENT 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. 4635 and 5482

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENTS OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT, AND FOR SUNDRY INDEPENDENT AGENCIES, BOARDS, COMMISSIONS, CORPORATIONS, AND OFFICES FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2001, AND FOR OTHER PURPOSES

Chemical Safety and Hazard Investigation Board
Corporation for National and Community Service
Department of Housing and Urban Development
Department of the Treasury
Department of Veterans Affairs
Environmental Protection Agency
Federal Emergency Management Agency
National Aeronautics and Space Administration
National Science Board
National Science Foundation
Nondepartmental witnesses
Office of Science and Technology Policy

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DEPARTMENTS OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT AND INDEPENDENT AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

WEDNESDAY, MARCH 1, 2000

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

The subcommittee met at 9:36 a.m., in room SD–138, Dirksen Senate Office Building, Christopher S. Bond (chairman) presiding.

Present: Senators Bond, Stevens, Mikulski, and Lautenberg.

FEDERAL EMERGENCY MANAGEMENT AGENCY

STATEMENT OF HON. JAMES LEE WITT, DIRECTOR

ACCOMPANIED BY GARY JOHNSON, CHIEF FINANCIAL OFFICER

OPENING STATEMENT OF SENATOR CHRISTOPHER S. BOND

Senator BOND. Good morning. The subcommittee will come to order. This is the first hearing of the VA-HUD subcommittee for the fiscal year 2001 budget. This morning we will hear testimony on the fiscal year 2001 budget request for the Federal Emergency Management Agency.

We welcome FEMA Director James Lee Witt and Gary Johnson, FEMA's Chief Financial Officer. Director Witt, we are very pleased that you brought your wife Lea-Ellen along today. We welcome her and really appreciate all the sacrifices and the dedicated effort she has made as you have conducted your duties at FEMA.

Mrs. Witt, I know the very active role that you have played in many of the Nation's disasters, helping out after the Northridge earthquake, the Oklahoma City bombing, and the tornado-related disaster in Oklahoma last year. As one who has visited an awful lot of disaster sites in my prior incarnation as a governor, I know how difficult and challenging it is to stay on the ground and help the people who are most in need, and your work and your role has been an inspiration to all of us. As a result, we will try not to be too rough on the Director today.

The President's budget proposal for the VA-HUD subcommittee totals about $84 billion in budget authority, an increase of almost $6 billion above the current year. While it appears that the caps imposed by the 1997 Budget Act would impose cuts that are too draconian and we must revisit the numbers, I warn all the agencies involved, do not pop any corks on any bottles yet.

There is a very strong commitment, which I share, to maintaining budget discipline, preserving the social security surplus for social security reform, and also taking care of absolutely essential items that we cannot control, which are going to increase, things like VA medical care and things like section 8.

FEMA's budget request totals $971 million in on-budget funds, an increase of $98 million over the current year, and an additional $2.6 billion in disaster relief contingency funds. That is a sizable increase which I fear we will find it difficult to accommodate.

FEMA proposes some new programs and some significant programmatic increases. Included in the budget is a new $25 million grant program for equipment for firefighters in distressed or needy communities. We have seen little detail on the program and I have to tell you we are concerned about initiating a new program under the tight budget constraints that we face.

FEMA is also requesting almost $24 million to begin the process of relocating its headquarters. This is an initiative that is aimed at improving security and enhancing FEMA's capacity to conduct disaster operations. I need to understand the costs better and the needs associated with the request.

In addition, the budget calls for an increase of $30 million for the emergency food and shelter program, 27 percent over fiscal year 2000. While the program seems to be functioning effectively and meeting a tremendous need for food and shelter, an increase of this magnitude again will be difficult to accommodate.

With respect to the disaster relief fund, it appears there is plenty of money currently in the FEMA bank to manage disaster costs for the rest of this year so long as we do not have any truly catastrophic events this year. Including contingency funds, FEMA estimates approximately $2.4 billion currently unobligated in the disaster relief fund. While there have been some really awful disasters this year, such as the tornadoes in Georgia and the avalanches in Alaska, the scale of disaster activity has been far less than usual so far this year, and we can only hope and pray that our luck holds for the rest of the year.

FEMA's budget proposes two new set-asides within the disaster relief fund which would set new precedents of using the fund for other activities: $50 million for the repetitive loss initiative aimed at eliminating those properties with significant repeat claims posing the biggest drain on the flood insurance fund; and $30 million for the flood map modernization fund to update and digitize FEMA flood maps, in addition to a new fee proposal projected to generate about $100 million in revenues next year.

While I would certainly acknowledge the need for funding in both of these areas, there are strong concerns first about earmarking disaster relief funds for activities not specifically authorized in the Stafford Act.

In addition to these fiscal year 2001 budget proposals, the administration has proposed a fiscal year 2000 supplemental request of $77 million for additional buyouts in Hurricane Floyd-affected States. These funds would be in addition to the $215 million provided already for buyouts in Hurricane Floyd States. Again, I express my concern and skepticism about the proposal since as we understand it none of the $215 million has been allocated to date

and there does not seem to be any basis as far as we can tell for requesting another $77 million.

We have asked the Inspector General and the IG has been looking at estimates of eligible properties for buyouts, and preliminary information that we have received is that eligible properties will be just a small percentage of the original estimate and that buying out eligible properties in Hurricane Floyd States likely will cost less than the $215 million already appropriated. In addition, much of North Carolina's projected costs appear inflated and inconsistent with the historic costs of buyouts in other States.

Also, I am worried that this program is not authorized. As we have discussed before, there has been no debate on what the appropriate Federal role should be in buyouts of substantially damaged properties, and I am not confident yet that a system has been set up to ensure that the most needy individuals and the most at-risk properties will be assisted. I will have a number of questions on that later on.

Turning to Stafford Act issues, I continue to have problems about the escalation of disaster relief costs. I was cast in the unfamiliar role of a skunk at a garden party a few weeks ago when the Environment and Public Works Committee marked up S. 1691, the disaster mitigation bill. There were many feel-good thoughts and lots of talk about how we need to spend more money, and I would assure you that I understand investing in certain projects could lessen future disaster losses. It is a good policy which I support.

I really fail to see the attention and commitment needed to tightening up the Stafford Act to provide better accountability and to assure that we are spending money only where it is most needed. Our guess is at this point that the bill in its current form would increase the cost of the disaster relief funds without providing savings in the near term and, as you and I know, in our part of the world, Mr. Director, as they say, that dog won't hunt.

As you know, the Inspector General made recommendations to improve the bill which would result in savings. I will be looking to amend the bill when it gets to the floor to improve the integrity and accountability of the disaster relief fund and to underscore the Stafford Act principle that Federal disaster aid is to be reserved for those events which exceed State and local capacity.

If the bill does not result in near-term cost savings or at least no net cost to the disaster relief fund, I would not be able to support it and would urge my colleagues not to as well.

Mr. Director, you have done much administratively to clean up disaster relief programs over the past several years. I congratulate and commend you on your recent efforts to develop a public buildings insurance rule. It is tremendously important to improve accountability for disaster costs and I urge you to stay on course to do all you can to finalize the rule before the end of the year.

But as we both know, there is only so much that can be done without changes in the law. We have an opportunity to legislate some much-needed improvements to the Stafford Act and implement some of the recommendations made over the years by the GAO and the IG. We look forward to your continued help and cooperation in those efforts.

Turning to another critical issue, we continue to worry about the intergovernmental antiterrorism/counterterrorism program. There does not appear to be a strategic approach administration-wide on this issue, and the roles of FEMA, DOD, and the Department of Justice remain confusing, at least to me and I am afraid to a lot of other people as well.

We are, I think justly, committing tremendous resources in this area. A total of about $10 billion in the current year is being expended, up from $6.5 billion in fiscal year 1998, and I know there are additional increases sought for fiscal year 2001.

According to September 1999 GAO testimony:

"A government-wide strategy that includes a defined end-state and priorities is needed, along with soundly established program requirements based on assessments of the threat and risk of terrorist attack. In addition, a comprehensive inventory of existing Federal, State, and local capabilities that could be leveraged or built upon is warranted before adding or expanding Federal response assets. Without these fundamental program elements, there can be little or no assurance that the Nation is focusing its investments in the right programs and in the right amounts and that programs are efficiently and effectively designed and implemented."

As you well know, Senators Stevens, Mikulski, Byrd and I last year asked the GAO to conduct some additional work on this issue, with special attention to first responder training issues and a look at how other countries organize their antiterrorism efforts. We are anticipating some results from the GAO by the end of April.

While FEMA has only a small piece of the intergovernmental antiterrorism effort, it is a very important one. FEMA has strong ties to State emergency responders and the first responder community which will be a critical link in this program, which I think will warrant FEMA playing a very important lead role.

Director Witt, I am very pleased to learn that you brought in our old friend John Magaw to head up FEMA's antiterrorism efforts, but I am really worried that the program seems to have been downgraded at the Department of Justice and the new DOJ National Domestic Preparedness Office seems to us to be floundering. We would like your advice on how to improve this program to ensure we are investing our resources in the best possible way.

That concludes my opening statement. Senator Mikulski, are you ready?

STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. I sure am. I was listening to every word. Just we are going so many places today.

Senator BOND. Yes, it is one of those days.

Senator MIKULSKI. Good morning, Mr. Chairman.

Senator BOND. Good morning.

Senator MIKULSKI. First of all, I want to welcome our FEMA Director James Lee Witt and his Chief Financial Officer Gary Johnson and the entire FEMA staff. Mr. Witt, you are the longest serving Director in FEMA history, and this morning marks the eighth time that you have come before this subcommittee to discuss your budget request. I would like to thank you for your service to the Nation because I truly believe under your leadership FEMA has reformed itself and went through a transition from a cold war agency with an often confusing domestic policy to where we are now.

But we know behind every great man is a surprised mother-in-law. I really got that joke from Connie Morella.

But I really want to—I think, one, not only your management ability, but the way that you responded to America's disasters, that being on the scene, to be able to work with the governor, the local FEMA directors. So we are very grateful. You truly were the 911 for America's disaster relief.

But in all sincerity, all those times when you had to leave home, be away, often during holidays, for extensive periods of times, we know that you had the support of a loving family. So on behalf of the Senate, I would like to thank Lea-Ellen Witt for her service to the Nation, because had it not been for her support I do not think you would have been able to support the United States of America in its time of need. So I would really like to give you a round of applause.

I would hope that as we go through this appropriations we would look at how to institutionalize the reforms that have been made on a bipartisan basis working with you and President Bill Clinton. When you came—well, actually, after Hurricane Andrew when FEMA's response was so disastrous and our President George Bush sent in Andrew Carr, his Secretary of Transportation, because of his skilled management ability, I said to Bill Clinton when he was running: You know, I do not ask for promises, but I am going to ask for one; I need a good FEMA director; we need to reform FEMA and we need to focus on the three R's. We need to make sure that the Federal Government in every State is ready, the readiness training; that we need to be able to respond when a disaster hits; and also we need to rehabilitate.

There have been lessons learned in all of those areas, and I hope that we are now on the path of truly institutionalizing those reforms. We have gone from rehab to really pre-disaster mitigation. We want to do prevention, and I am going to commend you for that role.

I know Senator Bond has concerns about how this is being implemented, and I share some of those concerns. So what we really need to do is make sure that we have very clear guidelines and even, if necessary, regulations on how we can do the prevention without creating a whole new program that ends up squandering resources. We need clear lines to be able to do that.

The other I would hope that is also part of this, we take a look at the antiterrorism. I am concerned that the hard work—I am concerned that the hard work of FEMA and other Federal agencies may be squandered because of the absence of a coordinated Federal response program. I do not want to go into this here in this type of forum, but I believe we have too much talk, too much money being thrown around, and no clear lines of command and clear roles, command, control, and clear agency authority.

Our first responders in an event of any type of attack on the United States will be both FEMA and our local fire department and our ER's. So I want to be sure that we have this, and we look forward to working with you.

I understand you have brought out of retirement John Magaw, the former Director of the Secret Service and ATF. I think this is great. I think this heartens you, too, Senator Bond, that we really

have a plan. I think HHS has been inept in the way it has planned for terrorism. We have left a lot at the FBI, we have given you things, and then there is HHS. They are going to get real cranky when I say this, but they are wandering in the wilderness with no clear triggers about what goes into operation at one standpoint. So maybe we could get them, everybody between the same white lines.

We also want to look at the emergency food and shelter grants. I know in my own home State it has meant a lot to poor people, many of whom have been facing horrendous situations. The new economy has not been a good economy for everybody. So we look forward to hearing more about this $30 million increase and where to do it.

So what we are looking for is if we put the right money in the right place, but also institutionalize our reforms, because we are the only one-stop shop on FEMA. It is scattered through a lot of committees and so on. So we are your one-stop shop. But you have been our one-stop shop in disaster relief.

So we look forward to your testimony and always look forward to working with you, and in whatever you choose to do in what lies ahead I say, God bless and godspeed to both you and Lea-Ellen.

Thank you.

Senator BOND. Thank you very much, Senator Mikulski. As always, you are very candid and on point with your comments.

We are pleased to be joined by Senator Stevens.

Senator STEVENS. He was here first.

Senator BOND. All right. Actually, I was going to go back and forth. But at the chairman's direction, it is now my pleasure to call on Senator Lautenberg.

STATEMENT OF SENATOR FRANK R. LAUTENBERG

Senator LAUTENBERG. Thanks, Mr. Chairman.

Mr. Witt, it is a pleasure to see you in a non-disaster environment.

Senator BOND. The best way.

Senator LAUTENBERG. As I listen to the compliments given from my colleagues here, I thought that maybe you needed a song that "disasters become you." But I did not really think that that would be appropriate.

But I do want to say, Senator Mikulski noted your length of service here, and excellent service. I think it is fair to say that each one of us at this table has seen you in a circumstance that is not the most pleasant. But nevertheless you have been, as we say, Johnny on the spot. You have been there, you have gotten there quickly, you have handled yourself wonderfully in the public eye, as well as doing your level best to alleviate the problems and the suffering that people have endured as a result of natural disasters.

So I am delighted to see you here today and hear the comments of my colleagues on both sides of the political aisle who share an admiration for the agency and yourself as well.

You and I are now in the next graduating class out of here, and I am sure that you feel, as I do, satisfied that you have had an opportunity to do something significant and also with some nostalgia about leaving to go on to more peaceful lives, each of us.

We were last together under very unfortunate circumstances. Last September, Hurricane Floyd had cut a swath through my State and the heavy rainfall caused rivers, namely the Passaic and the Green Brook, to overflow, resulting in millions of dollars of devastation. We flew over Bound Brook in a helicopter, I remember, and viewed the devastation along the Green Brook. We toured the Borough of Lodi together, and witnessed the breakdown of our telephone system for several days, which was very difficult.

We visited with some of the besieged families and you pledged the full resources of FEMA to assist my constituents. I am pleased that in your budget request you ask for funds to complete the buyouts of homeowners in flood plains who want to relocate to higher ground.

I noted also in your comments that you view that prevention ought to be a significant part of the FEMA agenda. I just got back from a trip to Antarctica and the South Pole, and I am concerned about what the future may bring us in terms of weather disturbances. The ice melt is something that I think is alarming. We are still doing a lot of research before coming up with specific conclusions, but the fact is that we know from the early signs in this year that we might be seeing some very turbulent weather around the country.

So as I look at you and your agency, I can think of few that have such a direct face to face relationship with the public.

I would hope, colleagues, that along the way that communities and States will rethink their policies on building permits, on engaging people in debates about allowing them to build in places that bring tragedy with them. I think it is important that an agency like FEMA, where there is so much experience, is a significant part of that interface.

People who are flooded out are desperate and need to rebuild their lives. I had an incident in New Jersey where I went to a flooded area and met a woman whose husband was in the hospital, four kids, disaster all over the place. We entered on the second floor, which was filled with debris from the flooding.

She had just taken out flood insurance weeks earlier. A year later I met her, and I asked her where she moved. Oh, she said, we rebuilt in the same place. So I said: Why would you do that? She said: Because we could not find anything else for the price that we were able to pay. What we did is we put in a 16-foot foundation, so now our first floor is where our second floor used to be; and it is a few steps up, but it is something that we can afford.

So it is not simply just a question of covering people with insurance and saying go ahead and find a different place.

So I say that you have done an outstanding job for New Jersey and for the country, and we need to make sure that you have the means to continue to do the job when disaster strikes. My State just experienced another tragedy. As you may know, on January 19 there was a terrible fire in a principal university in our State, Seton Hall University in South Orange, New Jersey. This fire killed 3 freshmen and injured 54 students, 2 firefighters, and 2 police officers.

The dormitory was equipped with smoke detectors, but was not required to have a fire sprinkler system. Since FEMA oversees the

U.S. Fire Administration—and we are pleased to see that they sort of have been resurrected—the agency that is charged with working to reduce life and economic loss due to fire, at the appropriate time in this hearing I would like to ask you a few questions about the Fire Administration's role in helping our learning institutions ensure that student housing is safe.

I thank you, Mr. Chairman, and look forward to hearing from the Director.

Senator BOND. Thank you very much, Senator Lautenberg.

Chairman Stevens.

STATEMENT OF SENATOR TED STEVENS

Senator STEVENS. Well, thank you very much.

Mr. Witt, James Lee if I can get personal, and Lea-Ellen, it is nice to see you here. I do not like the sounds that I have just heard, though, that indicate that people are ready to see you leave. I am working on a bill now that converts your office to one of those that is a 15-year term. No, I am serious. I think disasters are coming our way so often, experience is necessary and we ought to arrange something that gives you a little bit of financial incentive to stay another 7 years and get this thing really put together right.

You know, I am not sure the committee knows, our friendship started when you came up to the Miller's Reach fire. People who live in the wilderness were able to get some assistance to live in town, but they wanted to live in their own places and rebuild them themselves, and with common sense you modified those regulations and they actually rebuilt their own houses and saved the Government money and had the lifestyle they wanted.

And we had the Kenai River flood, and now we have had I think the worst avalanches that our State has ever seen in one year, a train wreck. My own little town was isolated for several days, shut off from food and fuel and transportation. We are the most disaster-prone State in the country. Most people do not realize that.

But you have probably visited our State more than you want. But the one time you wanted to come up and go fishing with us, you got there and you had a disaster somewhere else and had to leave. We have still got the latchkey out there for you and Lea-Ellen whenever you want to come back and finish that fishing trip.

But I am really serious. I think you are getting to the point where you are modifying some of these things so that we are into prevention rather than disaster relief, disaster repair, and what Senator Lautenberg has mentioned about protecting the flood plain. I think that the provisions that allow people—that we are going to deal with, to allow people to sell their homes and move out of the flood plain, make a lot of sense. I hope that you will not mind if I try to put that into avalanche country, too. You know, there is no lesson in the second avalanche any more than the second flood. I do think that we have got to get sensible about moving some of these areas out of the disaster zones.

What you have done I think is given us the ability, I hope, in the future to limit some of the cost to the taxpayers by virtue of prudence and preparation for disasters.

I want to talk to you some more about trying to build into some of the public facilities the ability to take care of persons that are

suffering from disasters. When we look at the civil air fleet, we pay those who operate the civil airlines to put in modifications that would be required if we ever have to use them for troop carriers, the civil air reserve fleet.

There is no reason why we cannot find some way to pay some of these people to modify their church basements or their school basements or their schools so that they can take care of these people that come in, instead of having them live the way they do when they have to seek refuge from a disaster, to have some areas in every part of the country prepared for that.

I really believe that you are on the right course, and on a bipartisan basis we ought to not only thank you, but sort of say, what do you need to stay around a little longer, because I think you have got a good team and there are some things that we have to do to make changes that your experience would tell us whether they are right or wrong.

I do not remember us going against your advice, James Lee, and that is a real significant achievement. I also appreciate the fact you have been totally bipartisan in your operation. Disasters should not have any political consideration at all, and you have carried through in just an absolute way. I have followed you around the country in many places, as you know, to see how we have recovered from some of these disasters.

We had the country's worst disaster, I think, in recent history in the 1964 earthquake. You were not around there then and we had a tough time, but the laws have changed a lot since then and I think that we may need to round them out a little bit more to make sure that you have the flexibility of dealing with these things so that you can save money and prevent having to pay the same family twice for recovering from the same type of disaster. We ought to have some incentives to avoid that.

But I am really serious. I am here to tell you that I think Alaskans, as all other residents of this country, are indebted to you and your wife for you have done. You have been a team and you have got a good team around you. I too applaud you for getting back into Government service the former head of the Secret Service, and there is others out there.

I think we ought to give you the opportunity to waive some of the provisions of the retirement law and give some of those people that do have a lot of experience to get on board, because if we are right, if we are right in our predictions that we are going to be subject to some of these attacks from some of these chemical and biological weapons in the future, yours is the agency, along with the National Guard, that is going to face the brunt of those and I think we ought to be prepared.

So I do thank you.

Senator LAUTENBERG. I second the motion, Mr. Chairman.

Senator STEVENS. I think we ought to find some way to do this, and I will have to talk to you privately. Lea-Ellen may have another plan in mind for you, so we will have to tread lightly here.

But the concept of having something that goes beyond, someone that goes beyond the possible end of an administration and really is in a position to put in motion long-term solutions to these dis-

aster problems I think is one we have to explore very thoroughly in this Congress.

Thank you, Mr. Chairman.

Senator LAUTENBERG. With that, you do not have to say anything, Mr. Witt.

Senator BOND. Thank you, Mr. Chairman.

That is a real set-up. You really want to go ahead and say anything, or do you just want to quit with that?

We were supposed to have a vote at 10 o'clock, but, knowing that things never work exactly as they are scheduled, we will continue now and invite you to give your testimony.

STATEMENT OF JAMES LEE WITT

Mr. WITT. Thank you, Mr. Chairman, Senator Mikulski, Senator Lautenberg. Thank you for your accolades and your comments and your support. I want to thank the members of this subcommittee for the support that you have given FEMA's programs and for all the time that the members and the staff have provided in reviewing our programs. With your continued assistance in the fiscal year 2001 budget, we hope to institutionalize many of the things that we have been working so hard on to this point.

This morning I am accompanied by many of the senior officials from FEMA including, of course, Gary Johnson, who is sitting to my right. Gary deserves much of the credit for putting FEMA's financial house in order. His hard work and dedication, and the hard work of his staff have truly straightened FEMA's financial records out.

Last year, for the very first time at FEMA, the fiscal year 1998 consolidated financial statements were given a clean bill. Just yesterday I was pleased to find out that the IG gave us an unqualified opinion on the 1999 financial statements as well. We will provide this accountability report to you.

I also want to take the opportunity to present to you John Magaw and thank him publicly for coming into FEMA and taking on the challenges of the antiterrorism program. He is a great man. He has got a tremendous challenge before him, but I know he is capable of meeting that challenge. He is well respected throughout the country by law enforcement, the fire services, and the other Federal agencies. We are very pleased to have him.

Senator BOND. Mr. Director, excuse me. We have had our summons. We want you to continue. Senator Mikulski will stay here and I will be back as quickly as I can. We will see if I can do the running through the airport thing. If you do not mind, I have reviewed and will continue to review your statement. Excuse me.

Mr. WITT. Thank you.

As many of you here know, today most likely could be my very last budget appearance before you—but after what Senator Stevens said, I do not know.

I do want to reflect back very briefly on my career at FEMA and what FEMA should strive for in the future, I keep coming back to the principle of responsibility. Today I hope we can talk about responsibility, not only responsibility in the fiscal year 2001 budget, but far beyond that.

I want to tell you how important this budget is for FEMA's future and for the future of our partners, the States, the local governments, and fire services, and all those people out there that are our partners that continue to serve communities on the front line.

The fiscal year 2001 budget and other related legislative initiatives continue to move down the path of success. I ask your support during this next year as we try to institutionalize reforms that underscore responsibility. Before leaving today, I also want to thank the subcommittee staff members that have worked so diligently with us and have been very committed to doing the best that we can for the country and for the agency. We do not always agree on everything, but I think in the end there have always been good and positive outcomes.

So I want to thank Carrie, Jonathan, and Paul for their very dedicated work with Mike Malone and the Congressional Affairs staff.

I also thank Senator Mikulski for the guidance she has given me over the last 7 years. We are here to answer your questions and would be happy to start any time you are ready.

[The statement follows:]

PREPARED STATEMENT OF JAMES L. WITT

Good Morning Mr. Chairman, Senator Mikulski, and other Members of the Subcommittee. I appreciate the opportunity to appear before the Subcommittee today to present our budget proposal for fiscal year 2001.

I want to thank the Members of the Subcommittee for their support of FEMA's programs and for all the time that the Members and staff have provided in reviewing our programs. Without your guidance, leadership and assistance, FEMA would not have been able to accomplish all that we have these past seven years. With your continued assistance on the fiscal year 2001 budget, we should be able to institutionalize many of the things that we have been working on to this point.

This morning I am accompanied by many Senior officials from FEMA. FEMA is made up of people who entered public service to help others. At FEMA, we have the privilege of working in an agency whose daily work, whose enduring mission, is exactly that: helping others. Whether the moment is the aftermath of disaster—as a family finds a home destroyed—or the beginning of opportunity—as a community joins Project Impact—we make a difference in people's lives. When people praise FEMA, I say a great deal of the praise is due to the hard-working, dedicated staff.

Sitting next to me is Gary Johnson, FEMA's Chief Financial Officer, who deserves much of the credit for putting FEMA's financial house in order. Gary is an excellent example of the selflessness and dedication that FEMA employees possess. When I arrived at FEMA, the financial records were not in the best possible shape, to say the least. Although I don't think Gary sought out the CFO's position, he was willing, as a good public servant, to take on this assignment and give it his best effort. Through his hard work and dedication, and the hard work of his staff, FEMA's books have been straightened out and last year, for the first time ever, we had financial statements that were given a clean bill of health by the Inspector General. These improvements are tangible. They have given you and your staff a clearer picture of FEMA spending priorities and the historical financial records that support these positions. These are measurable accomplishments of which we can all be very proud.

I'd also like to take the opportunity to introduce a person who is a relatively new face at FEMA but certainly not a new name to you. We are excited to have had John Magaw, former Director of both the United States Secret Service and the Bureau of Alcohol, Tobacco and Firearms, join the FEMA staff. As a well-known and respected official in the law enforcement community, John is going to help us with our interagency coordination of terrorism-related efforts. We are pleased to have him with us today as well.

As many here today know, this very likely may be my last Senate Appropriations Subcommittee hearing as Director of FEMA. We've come a long way together. Twenty years ago, President Carter signed an Executive Order creating FEMA. He re-

cently told me that FEMA has finally become the agency that he envisioned twenty years ago.

Despite this recent success, it has not always been smooth sailing. Seven years ago, some people wanted to abolish FEMA. Today, with the help of President Clinton, Vice President Gore, you and our other friends in Congress, our dedicated staff, and our partners at the State and local levels, we have become a model of government success. The renewal of FEMA is studied in universities, emulated in other agencies—imitated and admired literally across the globe.

Seven years ago, many of our customers were unhappy and our partners were frustrated. Today, our customer satisfaction ratings have climbed steadily to impressive heights. Our partners are reaching out to us—and we are reaching out to them—in a nationwide network of people working to strengthen America.

Seven years ago, communities across the nation were locked in a deadly cycle—caught by disasters unprepared, too often rebuilding where they were almost certain to be struck again.

Today, Project Impact has placed mitigation and prevention at the center of emergency management in the United States. We have saved lives—enhanced communities—and prevented needless pain. We came this far together by being responsible—responsible to our customers, partners and taxpayers.

As I reflect on my career at FEMA and think about what FEMA should strive for in the future, I keep coming back to this principle of responsibility. Today, I want to talk with you about responsibility—not only responsibility in fiscal year 2001, but far beyond.

I believe that we have four key responsibilities that we must address in fiscal year 2001 to ensure that we are well positioned for the future.

—It is our responsibility to ensure that the impacts of future disasters are minimized as much as possible.
—It is our responsibility to ensure that wherever possible, people are moved out of harm's way.
—It is our responsibility to protect people who respond to disasters and events.
—It is our responsibility to ensure that people have the resources necessary to address emergency management needs and issues.

MITIGATION RESPONSIBILITIES

First, FEMA's fiscal year 2001 budget proposals are aimed at further institutionalizing our responsibilities associated with disaster mitigation. We know natural disasters are going to continue to occur. We also have learned, through mitigation success stories, that steps can be taken to mitigate the impacts of future disasters.

In this area, we need to continue programs that encourage individuals, communities and States to take responsibility for mitigation. Our Project Impact initiative, now entering its 4th year, has made significant progress in getting individuals to be responsible for protecting themselves. With very little seed money to get communities started, local citizens have taken significant steps to mitigate against the impacts of future disasters.

In addition to continuing to fund this program, we are very encouraged by the Senate's efforts to move forward with Stafford Act amendments which would permanently authorize a pre-disaster mitigation fund. It is my hope that the Congress' actions would institutionalize the pre-disaster mitigation concept which will save thousands of lives by encouraging people to responsibly prepare for disasters.

PROTECTION RESPONSIBILITIES

We also have a responsibility to ensure that wherever possible, people are out of harm's way. You made a significant investment in this area when you approved $215 million that could be used to protect people who are most vulnerable to future floods like those associated with Hurricane Floyd. Despite this sizable investment in Hurricane Floyd-declared States, we've got a long way to go to responsibly address the needs of people who are at risk of flooding.

We know that needs still remain in North Carolina, New Jersey and other Floyd-declared States. That is why the President proposed an additional $77 million for buyouts of homes that could flood again.

But I don't feel that it is responsible to only respond to victims after a flood. We already know that there are many people who are vulnerable to flooding beyond the Floyd-declared States. That is why the fiscal year 2001 budget contains an initiative that would allow us to buyout many of the properties that have had two or more claims on the National Flood Insurance Fund.

You may ask why such a significant investment on the Federal Government's part is a responsible course of action. First, I believe that protecting the most vulnerable

people and properties is certainly a responsible course of action for us to undertake. Second, an investment now will recoup significant savings to the Federal Government in the future if we can avoid future disasters from occurring. Finally, when we buyout properties, we ask the States and local communities to take responsibility as well. The States must be involved in providing the non-Federal share and in helping prioritize where the scarce resources will be deployed. Local communities also frequently have to provide assistance with the non-Federal share and we require them to permanently deed restrict any properties that are bought out. That way, communities take responsibility for keeping future development out of floodplains.

In addition to providing the funding, we hope that this Congress will give FEMA ongoing authority to buyout properties at risk of repetitive flooding. This authority is necessary to further institutionalize our responsibility to help people at risk of flooding.

We also need to protect people from the risks of fires. America's fire death rate is one of the highest per capita in the industrialized world. Fire kills more than 4,000 people and injures more than 25,000 people each year.

We will soon be completing the renewal of the United States Fire Administration. Twenty-five years ago, the USFA was created in the aftermath of a report called "America Burning." That landmark study found America was losing too much and suffering too terribly from fires that could be prevented. We have commissioned an updated "America Burning" study, and we will complete it this year. We will reinvigorate USFA, strengthening its roles in training, research and public education. We want to once again make the USFA an engine of innovation in fire prevention technology. We're working to prepare the National Fire Academy to be a leader in the 21st Century.

Other individuals at risk include the working poor, the elderly and the people in the roughest circumstances who are helped by the Emergency Food and Shelter Program. During fiscal year 2000 you acknowledged our responsibility to these individuals by providing increased funding for this program. However, despite the funding increase, significant shortfalls remain and thousands more meals and nights of shelter are needed to help those at-risk individuals.

The proposed increase of $30 million brings the program up to $140 million. Our partners in this program—the Salvation Army, Catholic Charities USA, the American Red Cross, the National Council of Churches, the Council of Jewish Federations and the United Way of America—have joined with us to be careful stewards of these funds. The Local Boards that administer these supplemental funds in 2,500 communities are models of local decision-making and local responsibility. And it is important to remember that the millions of extra meals and nights of shelter that come from this program are all delivered with an administrative expense share of just under 3 percent.

RESPONSIBILITIES TO EMERGENCY RESPONDERS

We also have a responsibility to train and protect the people who must respond to disasters and events. For fiscal year 2001, we are requesting funding for several initiatives that will help us protect emergency responders.

Despite our technological advancements and the nation's collective wealth, firefighters in the United States' frequently fight fires without the benefit of the most advanced equipment available. To help address this problem, the President's budget proposes a new $25 million pilot grant program that would provide funding to fire departments serving needy and distressed communities. We know that a disproportionate share of firefighter deaths and injuries occur in communities that can not afford to provide the most up-to-date firefighter life and safety equipment. This grant program would be a way to help protect those individuals who are willing to risk their lives for the members of their communities.

We also are responsible for protecting people from terrorist acts. Because emergency responders are likely to be the first officials to respond to an act of terrorism, it is essential that they receive proper training. In addition to continuing already-existing terrorism training opportunities, the President's budget proposes an additional $3.9 million to further train six Urban Search and Rescue teams so that they will be prepared to respond to biological, chemical or nuclear events.

Finally, I feel strongly that we have a responsibility to provide FEMA employees with a headquarters facility that is safe, secure and that allows staff to respond to disasters that occur throughout the United States. The fiscal year 2001 budget contains a request for $23.6 million to relocate FEMA's headquarters facility from the current location to another location in the Washington, DC area. The current facility does not meet Level 4 security standards and it is limited in its flexibility. We need

to upgrade our emergency operations center and the current building keeps us from optimizing our capabilities.

RESOURCE RESPONSIBILITIES

Finally, we have a responsibility to give people the resources necessary to continue to address emergency management needs and issues.

Last year, you allowed us to streamline the method by which grants are provided to our State partners. Instead of multiple grants that required separate administrative overhead, we worked with you and your staff to create an Emergency Management Performance Grant Program which reduced State grants to a single funding stream. Initial reports from our State partners indicate their support for continuing this grant mechanism. We believe that reducing the red tape for both FEMA and our State partners allows us to spend more time focusing our efforts on disaster response and mitigation.

For several years running, we have all agreed that there is a significant need to modernize FEMA's flood maps. The fiscal year 2001 budget contains two different proposals for funding the first year of our seven-year Map Modernization plan. Modernizing the current map inventory and creating new maps for unmapped communities will provide invaluable tools for emergency managers, floodplain managers, lenders, insurance agents and FEMA employees. Bringing the map inventories up-to-date will even reduce the number of cases in which Congressional offices are asked to get involved. Clearly this program would be a responsible investment that would pay dividends for the future.

The fiscal year 2001 budget also requests an increase for Salaries and Expenses. As I mentioned earlier, FEMA has a very hard working staff that is fully committed to helping others. It is our responsibility to ensure that the FEMA staff has the resources and facilities necessary to serve the American public. Without a safe and secure work environment, staff resources will be hampered. Without an up-to-date emergency operations capability, we will be limited in our response to disasters as they occur across the country.

I want to conclude by telling you how important this budget is for FEMA's future and for the future of all Americans.

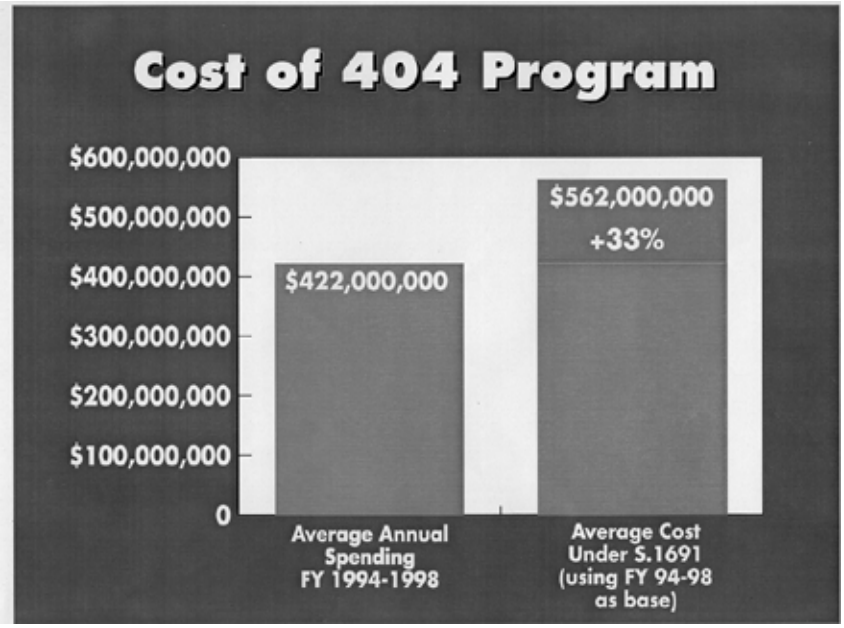
I've been fortunate in my career. I've met interesting people and traveled to fascinating places. I've had the privilege to serve a great President who is also a great friend. Together with a dedicated Congress and committed staff, we have been able to strengthen FEMA's programs and response capabilities.

Despite all of our work, the real measure of our success won't be realized for many more years. If ten years from now, all States and local governments take full responsibility for properly insuring or protecting their buildings, our efforts were successful. If twenty years from now we are working even harder to protect our emergency management responders, we created a lasting legacy. If thirty years from now, all citizens, States and local governments have taken steps to mitigate against the effects of future disasters, we will have succeeded in institutionalizing responsibility.

The fiscal year 2001 budget and other related legislative initiatives continue to move us down this path to success. I ask your support during this next year as we try to institutionalize responsibility.

Before leaving today, I also want to say "thank you" to the Subcommittee staff members with whom we have had the privilege of working. From working with your Subcommittee staff everyday, I'm sure you know the level of professionalism and commitment to public service that they bring to their work each day. FEMA has benefited greatly from their knowledge and expertise. So to Carrie Apostolou, Jon Kamarck, Paul Carliner and other Subcommittee staff with whom we have worked these past seven years, "thank you."

Thank you for the opportunity to appear before this Subcommittee and I am happy to answer any questions you may have.



Senator MIKULSKI [presiding]. Well, I think that this is a very good time perhaps for us to recess until we can go vote and then return.

Mr. WITT. Sure.

Senator MIKULSKI. So we thank you for your testimony. The committee is going to stand in recess subject to the return of either Senator Bond or myself. Before we do leave, I also wanted to acknowledge, because in my eagerness to talk about antiterrorism we did not talk about the U.S. Fire Administration in Emmitsburg, something that I am very preoccupied with, and also the implementation of the Blue Ribbon Commission. I think they are a very valued resource and we need to make highest and best use of what we have. So we look forward to continued conversation.

Thank you. This committee stands in recess until the return of Senator Bond or myself.

REQUEST FOR BUYOUTS

Senator BOND [presiding]. The hearing will reconvene. I thank our witnesses and guests for their indulgence.

Mr. Director, I will, as I said, review your full statement and I would like to ask a number of questions, a few things that are very important.

First on the buyouts, the $77 million request, the Inspector General has suggested that only 2,200 properties in North Carolina would likely qualify for buyouts and the likely cost would be less than $140 million, excluding the State costs here. I would like to know what the basis was for the request and whether the Inspector General's information was available at the time of the request, whether it was considered. Would you comment on that?

Mr. WITT. Sure. I believe that work by the Inspector General's office is ongoing. They developed an estimate—a preliminary estimate—and should be finishing that up soon. I think the important thing is to look at the information prepared by our inspectors and verifications of houses destroyed.

I am not saying all 3,144 homes that were destroyed were in the flood plain, but most of them were. Also, there were 7,469 owner-occupied homes just in North Carolina that had 2 to 5 feet of water in them, and 1,278 that had more than 5 feet of water in them. So I think it is important that the IG working with mitigation staff—identify and verify the structures substantially damaged and destroyed within the 100-year floodplain. Without that verification I cannot tell you, Mr. Chairman, whether the funds will be enough or not.

At the present time we have given you figures that we felt are appropriate.

BUYOUTS AFTER HURRICANE FRAN

Senator BOND. Well, obviously we are going to continue to work with you on this.

I was disturbed by an AP article earlier this month that indicated that there were some buyouts of upscale homes and perhaps second homes, vacation homes, that did not really meet the cost-benefit test. I wonder if FEMA has looked into this and what is being done to ensure that the at-risk properties, the needy individuals, are the ones who are given priority. Excuse me. It was Hurricane Fran.

Mr. WITT. Yes, I saw that article as well. We are very cautious about what we target for buyout. The most important and critical thing is if the property is within the 100-year flood plain and it is substantially damaged, it needs to be bought out. I have not seen too many of the houses in the $400,000 range bought out at all. There may have been one or two in cases that I am not aware of, but we are very careful and we do look at these very closely and will continue to.

One thing I want to add, Mr. Chairman. When I was talking with your staff, the Inspector General's office, the State of North Carolina, other States and our mitigation directorate, we are going to prepared a monthly report that lists the properties for which offers have been made, the amount of that offer, the pre-disaster value of that property, and the cost-benefit ratio of anticipated savings.

We are going to require that every month so we can make sure that we are targeting the right properties, that the offers are accurate, and that there is a cost savings. We are going to do that monthly because we know the importance of this.

PROPERTIES WITH FLOOD INSURANCE

Senator BOND. I trust you are looking at the number of properties where they have had flood insurance, and it would seem to me that priority should be given to those people who are willing to help themselves. I would also appreciate your comments on the statement you made last year about the agency's support for re-

quiring homeowners who do not accept a buyout to pay actuarial rates in the flood insurance program. Is that still your position?

Mr. WITT. Yes, sir. I took a few arrows on that position, in some cases, but I feel very strongly about this. I feel that it is important that the responsibility reside at the local level and with individuals as well. We are responsible to meet their needs and requirements if there is a disaster, beyond their means. We have gone back and looked at the Federal insurance administration's data and see that 10,000 properties repetitive loss properties of which 1,300 have had two or more claims resulting in costs that exceed the value of the property.

It does not make sense to continue spending $200 million annually in repetitive flood losses. Legislation has been introduced to address this and we are hoping that it will pass.

The insurance that has been paid out so far just in North Carolina is $139 million on flood insurance claims. It probably will come close to $200 million in flood insurance claims. I addressed this with Eric Tolbert, the State mitigation director of North Carolina, to ensure that they are tracking with our staff the properties that had flood insurance and making sure that, if that insured property is substantially damaged and within the 100-year floodplain, that the insurance is offset by the buyout amount.

PUBLIC BUILDINGS INSURANCE RULE

Senator BOND. Good.

Another aspect of insurance. As I indicated, I commend you on your work on the public buildings insurance rule. I have joined you in being the designated javelin catcher on that one. Nothing like having a specialty on the track team.

When do you expect to have a final rule? What is the estimate for how much this can save us? And what other problems do you see, and are you confident that you have addressed the procedural problems that the GAO identified in the development of the rule?

Mr. WITT. I think we have addressed the GAO problems in developing the rule. I think the advanced notice of the rule allowed 45 days for comments, the published rule 60 days, and then 90 days for a final rule.

I found out an interesting fact regarding my home county, Yell County, Arkansas, which is a very poor county. I called my son, who is the county judge there, our son, and I said: "Jimmy, are you buying insurance on your public buildings?" Two courthouses, two county libraries, two county hospitals, two county jails, and a general detention center. He said: "Why, yes, dad; we pay $44,000 a year for insurance on our public buildings."

I received a letter from the California delegation—every member of the delegation signed it—opposing this. I talked to an insurance broker in California. It was interesting to learn that the requirements, the insurance on public buildings requirements that we are going forward with, it is interesting that 51 of 58 counties will already meet those requirements. Also, 1,500 communities in Texas will meet those requirements. One hundred and fifteen cities in the West will meet those requirements by being in this pool.

What my concern is, if we do not do something then all those counties and cities in the East, in the South——

Senator BOND. They are going to say why bother, yes; save $44,000.

Mr. WITT. I think it is important that local governments and State governments have a pool from which to buy the insurance. If a lot of the communities are already meeting that requirement we should go on with it.

Senator BOND. That sounds good to me.

Senator Mikulski, thank you for joining us. Do you have some questions?

REFORMS AND PRIORITIES AT THE NATIONAL FIRE ACADEMY

Senator MIKULSKI. Yes, I do, Mr. Chairman. And I know our staffs will be cooperating.

Mr. Witt, my very first question really goes to the Fire Academy at Emmitsburg, which I believe is a national resource, but really had not been utilized to its full capacity, and there are a variety of—it was tattered in some ways. The Blue Ribbon Commission said that there were three areas that needed to be improved: leadership, resource management, and communication.

Could you share with us or perhaps even have your person heading the Academy speak to really what are truly the reforms going on at the academy; number two, what do you see are your priorities for the Fire Academy, particularly in education and training? Senator Lautenberg gave one. Fires are up in my State. Could we hear yours, and what resources you need?

Mr. WITT. Senator Mikulski, I think we are moving in the right direction for the USFA, in the sense that the blue ribbon panel that I asked to serve as a panel included every national fire association in America. These organizations came together, met, developed 34 requirements that they felt were important to be implemented at the USFA and the Fire Academy. To date, we have implemented 17 of the recommendations.

One of those was to recommission "America Burning." It is 25 years old. It needs to be brought up to date to reflect today's threats. Hopefully that will be completed in May. Also, we found that by reorganizing part of the Emmitsburg Fire Academy and putting in place a chief operating officer to facilitate the communications between our Fire Administrator, our advocate now for our policies and our programs for the firefighters, the academy has made a huge difference. Hopefully the rest of the reorganization will be completed by June.

Senator MIKULSKI. Excuse me. What is being completed in June, the reorganization?

Mr. WITT. Yes, and I am very pleased with what has been done so far. Some of the panel's recommendations such as the distant learning are very important. We have so many firefighters across the country that cannot afford to come to Emmitsburg, that we need to take the training to them.

You and I know there are over 53,000 fire injuries a year, there is an average of 100 firefighter deaths a year. Firefighting continues to be the most dangerous profession that we have in this country, and we are going to have to do more to reduce injuries and save lives for our firefighters. It is very important.

Senator MIKULSKI. Well, we want to hear more about that. You are recommissioning "America Burning"?

Mr. WITT. Yes.

Senator MIKULSKI. When does that start and when does that end?

Mr. WITT. It has already started and should be completed in May.

Senator MIKULSKI. May of this year?

Mr. WITT. Yes, ma'am.

Senator MIKULSKI. So then we will have a blueprint and a reorganization.

Mr. WITT. Yes, ma'am.

REFORMS AT FEMA IN THE LAST SEVEN YEARS

Senator MIKULSKI. Well, let us continue that further, but really there are more fires and more different kinds of fires, and because of the gallantry and efficiency of our local fire departments I believe America has gotten complacent. Therefore we need to be able to support them, not only with best technology and best training, but also we need to do, I think, public awareness. We look forward to those recommendations.

Let me go on to another topic that is very important to me, which is the institutionalizing of the reforms made at FEMA under your direction. Could you identify what we are doing in this appropriation to institutionalize those reforms? In the short time we have available, could you give us the highlights that you want to be sure that you have left as pillars for either you to continue to stand on or a new director to be able to stand on?

Mr. WITT. I think it is very important that the repetitive loss legislation gets passed and also that we look at the flood mapping issue in this country. The inventory of flood maps is in very serious condition. Looking at the repetitive flood losses and the flood mapping programs is critical if we are going to cut disaster costs. My goal is to strive to do that, because I know that dollars are so precious and so tight.

I believe that responsibility is important for locals and States and ourselves. By doing the things that we are doing now, we will, I hope, institutionalize responsibility for the future. The Stafford Act amendments, the repetitive loss legislation, and the flood insurance proposals are critical. We are working with OMB to try to get some agreements with them on other proposed legislation, particularly for the subsidized rates for secondary vacation homes. A lot of this has to be cleaned up.

If it is, then I think we will be in good shape going into the future by cutting costs and saving lives.

Senator MIKULSKI. Well, I thank you, Mr. Witt. I have other questions I will submit for the record. Conversations were amplified both with you and Mr. Magaw. Mr. Magaw, we really welcome you back and it is nice to see you again, because I think our conversations on terrorism are left for another forum.

Is Mr. Burris here from the Firefighting Academy?

Mr. WITT. Ken could not be here today. Ken Burris is the former fire chief of Marietta, Georgia. He has over 20 years of service, and is very, very talented. We are very fortunate to have him.

Senator MIKULSKI. We are looking forward to meeting him the next time we are in Emmitsburg, so thank you.

Mr. Chairman, I will submit other questions for the record.

Senator BOND. Thank you very much, Senator Mikulski. We will of course hold the record open for questions, and I will have quite a few to submit myself. Thank you very much for your participation.

Senator Lautenberg.

Senator MIKULSKI. And I am going to excuse myself to go to the elementary and secondary markup.

Senator BOND. We will understand. Thank you.

SPRINKLER SYSTEMS IN COLLEGE FACILITIES

Senator LAUTENBERG. Mr. Chairman, I will be brief.

I just have a couple of questions that I would like to ask you. They relate to the terrible accident at Seton Hall which I mentioned. Director Witt, what we find is that it is difficult to get accurate data about the extent to which all student housing is equipped with life-saving sprinkler systems. I note that there was a forum on college fire safety and they said that only—the report said that only 27 percent of the student housing had fire sprinkler systems.

It would be useful to get full information about this and be able to send copies to the various educational institutions. Could the Fire Administration undertake a study of that for us? That would be very helpful. And if the study included recommendations on the best way to encourage academic institutions to install fire sprinkler systems, all of the institutions, the facilities that are on the campuses, if we could do that. And I would like to work with you to begin such a study and hopefully be finished before at least I—I have a specific ticket to leave town. It seems that yours maybe rejected. I have not had that kind of groundswell. You had a groundswell of three persons here; that is pretty good.

Also, the Fire Administration produced a report on college fire safety that recommended the establishment of an information clearinghouse. I think that the Fire Administration would be an appropriate place for that as well. Would you agree?

Mr. WITT. Yes, sir.

PUBLIC AWARENESS OF FIRE DANGERS

Senator LAUTENBERG. The Fire Administration's report specifically cited a link between fires and the consumption of alcohol. The report recommended that by associating fire safety with alcohol consumption it may be possible to reduce some of these fire losses. Young people will be capricious and sometimes engage in things that look like they are fun and they are fun until something happens.

I have been a strong advocate of establishing a nationwide advertising campaign against underaged alcohol consumption. I wrote the law to raise the drinking age to 21. Could we get some help in getting a view from your people or getting a communications outlet through your department to see if we can just raise a caution there? I think it would be a good idea, because the consequence—we know what the consequence is of drinking and driving, but we are not certain that people are aware of the consequence of exces-

sive horseplay and so forth as a result of drinking that might lead to fire disasters on the campus.

If we can find anything about cause and effect there, that would also be helpful.

Mr. WITT. Our U.S. Fire Administrator, Ms. Carrye Brown, is with us today and I know that she has been working very, very hard on establishing a public awareness program. Also, we have developed videos and pamphlets that have been shared with the universities to help address some of the fire-related and alcohol-related fire deaths.

But, I think a study at the universities, particularly of the sprinkler systems, is absolutely critical. We know that across the country there are so many universities that are at risk for all-hazards. Under our disaster-resistant universities concept—the University of Berkeley is doing a study on this, and we will share that with you—we are looking at how universities can be better prepared before something happens. I think it will help save lives and save dollars in the future. So we will be happy to share that with you when it is completed.

Senator LAUTENBERG. Thank you.

Thanks, Mr. Chairman.

Senator BOND. Thank you very much, Senator Lautenberg.

Director Witt, we have a number of documents and information here from the GAO and their testimony a month ago and the May 1996 report. I think that everybody has that. I would like to make a copy of the February 15 letter from the Deputy Inspector General to our committee part of the record as we discuss S. 1691.

[The information follows:]

As requested, following are the issues that we discussed during our meeting on February 7, 2000, concerning Senate amendments to the Stafford Act (S. 1691).

Overall, the amendments have many positive features that we wholeheartedly endorse, such as the cost estimation procedures, the conditions for assistance for private nonprofit facilities, and the emphasis on mitigation. Our concerns are not so much with what the amendments include, but rather with what they exclude. The amendments do not go far enough, in our opinion, to control the Federal cost of disaster assistance and to ensure coordination between FEMA's various disaster preparedness, mitigation, and relief programs. Specifically:

Under Section 203, PREDISASTER HAZARD MITIGATION, the amendments do not make any reference to FEMA's Emergency Management Performance Grant (EMPG) Program. Yet the EMPG Program is the Agency's primary mechanism through which non-disaster funds are made available to States for mitigation planning and pre-disaster mitigation initiatives. Language should be added to this section that recognizes the EMPG program and its relationship to the technical and financial assistance envisioned under this section. Also, this section could be strengthened by (1) providing restrictions or parameters on the type of projects that this program will support, (2) defining what constitutes an "effective public-private natural disaster hazard mitigation partnership," and (3) describing how FEMA will deliver technical assistance to State and local communities, i.e., with FEMA staff, contracts, or grants.

Under Section 204, NATURAL DISASTER MITIGATION ZONES, add specific language that would address local community compliance with the National Flood Insurance Program's substantial damage rule. The substantial damage rule holds communities responsible for ensuring that mitigation action takes place whenever the cost of restoring a damaged structure to its pre-damaged condition is 50 percent or more of its market value. A legislative mandate, coupled with appropriate sanctions such as increased cost share or reduced assistance for communities that do not adequately enforce the substantial damage rule, would contribute significantly to increased compliance, resulting in more effective mitigation measures to reduce repetitive losses.

Under Section 204, NATURAL DISASTER MITIGATION ZONES, curtail the availability of assistance in specified coastal areas. Because of FEMA's disaster recovery and flood insurance programs, the Federal government has been criticized for its apparent public policy of encouraging development in high risk coastal areas. The Stafford Act Amendments provide a unique opportunity, in our opinion, to specify disincentives for development in those areas. For example, provisions could be included in the amendments that eliminate flood insurance rate subsidies for secondary homes in coastal areas.

Under Section 204(a)(3)(C), AVAILABILITY TO THE PUBLIC, stipulate that maps and services shall be made available to the public for a nominal fee to be established each year by the Director. These revenues would be invested in the Fund.

Under Section 404, HAZARD MITIGATION, add language that provides statutory guidance for property acquisition and relocation assistance, such as:

—funding limitations
—eligibility criteria
—cost/benefit requirements
—prohibition on rebuilding in a special flood hazard areas
—basis for amount to be paid to homeowner
—priority ranking system that ties in with eligibility criteria
—post buyout assessment of effectiveness

We believe the need for explicit statutory requirements for the buyout program is important because of its enormity (expenditures approaching $1 billion) and the emphasis that has been placed on buyouts as an essential mitigation tool.

Under Section 404, HAZARD MITIGATION, either eliminate or reduce the 15 percent (20 percent under the amended version) that is set aside under this section for hazard mitigation measures. Under the current funding mechanism, the program has variable and unpredictable funding levels. Also, it does not ensure that public funds are being spent on the most pressing national priorities, nor does it ensure that public funds are being awarded to State or local governments that are genuinely committed to reducing damages from future disasters and supporting ongoing non-Federal hazard mitigation measures. Instead, we proposed that Congress should consider establishing under Section 203, PREDISASTER HAZARD MITIGATION, a discretionary grant program. The program would be funded through an annual appropriation that gives FEMA the discretion to determine, through a competitive process, which applicants are best suited to address the requirements and priorities of the Nation's pre-disaster hazard mitigation goals and objectives.

Under Section 406(c), LARGE IN-LIEU CONTRIBUTIONS, add language specifying that, to qualify for large in-lieu contributions, the cost to repair a public facility must exceed 75 percent of the pre-disaster value of the property. Currently, FEMA authorizes the construction of a new facility whenever the damages exceed 50 percent of the pre-disaster value of the property. The 75 percent threshold is more in line with national insurance standards for replacement of damaged facilities. Repairing a facility would be more cost effective than constructing a new one.

Under Section 406(e), ELIGIBLE COST, clarify the current language that stipulates eligible public assistance costs should be estimated in conformity with current applicable codes. It should be made clear that codes in effect at the time of the disaster are controlling.

Under Section 408, TEMPORARY HOUSING ASSISTANCE, require disaster victims who need home repairs in lieu of other types of temporary housing to seek loan assistance from the Small Business Administration before receiving grant assistance from FEMA. Home repairs would not be delayed since SBA processing time has been reduced to about 7–12 days for home loans. According to FEMA estimates, this would result in annual cost savings of about $109 million.

Under Section 411, INDIVIDUAL AND FAMILY GRANT PROGRAMS, authorize FEMA, in consultation and coordination with the State, to provide direct financial assistance to individuals or families. The Federal share should be equal to 75 percent of the actual cost incurred and the remaining 25 percent of the cost should be paid from funds made available by the State. Also, since assistance for the IFG program will be provided directly by FEMA, there will be no need for providing the State a 5 percent administrative fee. According to FEMA projections, an annual cost savings of $8,756,200 would be realized.

Repeal Section 417, COMMUNITY DISASTER LOANS. Based on our assessment of the this program in fiscal year 1995, we estimated that the default rate for these loans would be 97 percent and the rate for loans subject to the Credit Reform Act would be 100 percent. With these facts in mind, we believe a disaster grant would be a more prudent and cost effective means to assist State and local governments that suffer a substantial loss of tax or other revenues after a disaster and demonstrate a need for financial assistance to perform governmental functions. The

Credit Reform Act of 1990 imposes complex accounting and funding requirements for loans. Unlike a grant program, additional appropriations are required to cover the subsidy and administrative expenses associated with each loan. In fiscal year 1994, for example, these expenses exceeded $11 million.

Under Section 705(c)(1), REBUTTAL OF PRESUMPTION OF RECORD MAINTENANCE, clarify the language that defines the binding nature of grant requirements. To eliminate any confusion about what constitutes the "binding nature of grant requirements," we suggest that this section be revised to read: "The payment was authorized by an approved grant agreement specifying the costs. FEMA's estimate of disaster costs as reflected in a Disaster Survey Report does not constitute an approved agreement.

Again, thank you for the opportunity to share our concerns with you regarding the Senate proposal to amend the Stafford Act. Should you have any questions or wish to discuss our comments in more detail, please contact me.

HAZARD MITIGATION PROPOSALS

Senator BOND. One of the things that has concerned me about S. 1691, is the average annual spending in the 404 program has been $422 million, and as we interpret S. 1691 that would go to $562 million, or a 33 percent increase. There have been a number of suggestions from the IG as well as from the GAO. I would like to know if you think there are any of them that are not practical or if you see any significant problems with them? Do you have any comments on the proposals in general?

Mr. WITT. I think some of the proposals are very good. Some of them I would probably not agree with. I think it is very important that some form of the 404 program continue to be in the disaster program because many times pre-disaster prevention may not address all of the problems after a disaster associated with rebuilding.

I think the concept that your staff talked to me about is very interesting as are the IG's recommendations.

Senator BOND. The competitive grant program?

Mr. WITT. Yes, sir. I did share that information with the NEMA when I visited with them. They agree to work with us and your staff in looking at this and seeing what the possibilities are.

WORKING WITH NASA DATA FOR FLOOD MAPPING

Senator BOND. On this and so many others, we would appreciate your discussion and obviously we will be in communication with you on that program and the other recommendations.

Let me turn to flood map modernization. Since this committee has the unique privilege of funding NASA as well, I am interested in the collaboration. We had some discussion about the ability of NASA to work with FEMA and I understand NASA recently flew a mission involving topographical mapping. How is your effort to utilize NASA's resources moving and can we lessen the costs, and have you encountered any roadblocks or problems in that relationship?

Mr. WITT. Money.

Senator BOND. They are charging too much? Is that what I am hearing you say?

Mr. WITT. Yes, sir. I think it could have possibilities to really, truly help us. I have seen a brief overview of the maps. I am going to go meet with Dan Goldin to look further at this. Some of their

information is classified and they are not going to be able to release it. But, a lot of it I think we could be using.

But I think also we need to work on the cost that is charged for this in order to save money. Federal agencies' administrative costs vary and some are higher than others.

Senator BOND. We will pursue that. I think we have two friendly agencies working together and we will want to encourage them to work more cooperatively.

Mr. WITT. Thank you.

LICENSING FEE FOR FLOOD MAPPING

Senator BOND. Talking about something, though, that has gone up the flagpole without any salutes, last year's settlement fee, and this year there is a new $12 licensing fee proposed. Have you submitted it to the Banking Committee, and do you really think there is any chance of getting that enacted?

Mr. WITT. Mr. Chairman, I am always hopeful and we are always trying to come up with alternative solutions for funding this including sharing the costs with the people that use them so that it is not just a burden on the taxpayers. We have hopes for implementation of the fee, but I cannot guarantee that the Banking Committee will agree with the proposal that we put in the 2001 budget.

The proposal moves the process away from the bankers, and places it with map determination organizations using the regular tracking system that we have. I am hopeful, but I cannot guarantee it yet.

FEMA'S ROLE IN COUNTERTERRORISM

Senator BOND. All right. A final question. I would like your comments on the counterterrorism program. I mentioned concerns about whether we are focusing adequate attention on it. I would just like your general comments on how you think the program is focused, coordinated, what FEMA's role can be, and how well the concerns we have had for the last year or so have been addressed.

Mr. WITT. I am very concerned about this program. I am very concerned that the people out on the front line get exactly what they need. Attorney General Janet Reno and I talked this week, and I expressed my concern about the NDPO, including where it has been put. I feel that it should be elevated to the level of at least a director or deputy director's office in the FBI.

We have not come to agreement on that yet. I feel like that it is very important now, with John Magaw now heading up the consequence management side, to elevate the anti-terrorism office in FEMA to a co-chair level with the NDPO—especially when you look at what we do in the areas of planning, development, training, and exercises.

Our programs cost across all lines and involve over 15 or 16 partners. I feel strongly about this program and the importance of it. But I do not think we are where we should be yet.

Senator BOND. Mr. Director, I think it is safe to say this committee shares your concerns and we are going to do everything we can to work with you to address those concerns, because this is something that cannot be downgraded to an afterthought or an of-

fice in the basement someplace. This has got to be able to bring together all those resources.

ADDITIONAL COMMITTEE QUESTIONS

With that, I would like to thank you for the cooperation and wish you well, and maybe if Senator Stevens is successful and Mrs. Witt does not veto it we may have a chance to see you back again. But we will be submitting questions for the record.

[The following questions were not asked at the hearing, but were submitted to the Agency for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR CHRISTOPHER S. BOND

BUYOUTS

Question. Please describe the basis for FEMA's $77 million fiscal year 2000 supplemental request for additional Hurricane Floyd buyouts.

How will FEMA ensure that the most at-risk properties, and the most needy individuals, will be given priority in this program?

Answer. FEMA derived the $77 million estimate for supplemental buyout funding needs by contacting the affected States in early January 2000. FEMA requested that the States identify the anticipated need for buyouts generally meeting the criteria as defined in the previous Supplemental for Floyd-related buyouts. States based their estimates on best available information, which in most cases involved letters of intent, pre-applications, other communication with affected communities, or information gathered by the State and/or FEMA region during applicant briefings and fieldwork.

FEMA is working closely with affected States to ensure that the funding will only go towards valid needs that meet the criteria of the appropriation law. FEMA is requesting the States to identify the most heavily impacted structures as candidates for this buyout program. States will receive funding allocations only after they demonstrate the number and value of properties that meet the program requirements. Our implementing regulation stressed to States that assisting low and moderate income families who suffered major disaster damage is a priority use for this funding. Also, based on information we have received so far, nearly all of the properties proposed for acquisition are relatively low in value for their respective areas. -

Question. Can you estimate how many of the buyout properties will have had flood insurance? Will priority be given to those properties?

Answer. At this time we do not yet know how many of the potential buyout candidates have flood insurance. We will better be able to provide this information as communities provide details about participating properties. Our estimates show flood insurance coverage in North Carolina to average approximately 34 percent in the Special Flood Hazard Area. While a significant number of these policies are in coastal areas, many buyout participants are expected to live in slightly inland riverine areas, rather than coastal. States and communities have the flexibility to determine which properties are the highest priority for assistance, among those that meet the stringent eligibility requirements.

Question. Last year you said FEMA supported requiring homeowners who do not accept a buyout to pay actuarial rates in the flood insurance program. Do you still support this, what is the status of this effort, and when will FEMA have a final rule?

Answer. FEMA is developing the program policy and guidance to support the implementation of the "Mitigation Offer". The Federal Insurance Administration (FIA) published a proposed rule on August 5, 1999 that would apply full-risk premiums for flood insurance coverage to target repetitive loss properties whose owners decline an offer of mitigation funding to acquire or elevate their structure. Target properties include those with four or more insured losses, as well as those structures that have had two or three losses that cumulatively exceed the building value. There are currently approximately 10,000 properties on this target list. FEMA has also drafted a Federal Register Notice that outlines the procedures necessary in making the official mitigation offer. This draft has been shared with our State partners, and we are incorporating their comments before publishing the Notice. We expect to be able to make official mitigation offers by this summer.

Question. The Inspector General has listed a number of options to improve S. 1691, the Disaster Mitigation bill, recently marked-up in the Environment and Public Works Committee. Please describe for each proposal whether FEMA supports the recommendation, and the rationale for FEMA's support or opposition.

Answer. Many of the Inspector General's recommendations warrant additional consideration. As we committed during the Senate Appropriations hearing, we will consult with our State partners through NEMA to discuss many of these proposals. The following is a recommendation-by-recommendation analysis:

—*Under Section 203, PREDISASTER HAZARD MITIGATION*.—We believe the recommendations made for this area are worthy of future consideration as Project Impact matures. At this time, we would like the communities, and the States that recommended their selection, to be given an opportunity to shape the program in ways that fit the individual community. Experience may dictate that we may want to limit some eligible activities as suggested, but at this stage of the program's growth we do not want to limit the approaches various communities may choose. Also, the connection to EMPG is something that may evolve as States gain experience with Project Impact, however, given the unique relationship between FEMA and the communities, that linkage is probably premature at this point.

—*Under Section 204, NATURAL DISASTER MITIGATION ZONES*.—FEMA supports the substantial damage rule and acknowledges that communities often do not adequately enforce this requirement. To combat this lack of enforcement, FEMA has developed a variety of mitigation tools to help communities better implement the substantial damage determinations and provides homeowners with Increased Cost of Compliance flood insurance coverage, as well as other forms of financial assistance. At the same time, there are sanctions currently in place for communities that fail to enforce this rule. Currently, a community that does not enforce the NFIP substantial damage rule can be placed on probation or even suspended from the program. While the merits of incentives versus disincentives may be debated for helping communities better comply with the substantial damage rule, it is clear that Section 204 is not the appropriate place in legislation for these measures. It is not the appropriate place because Section 204, as currently written, applies to individual buildings and not to communities; substantial damage determinations are made during the same period of time in which disaster obligations are made, making it difficult to change cost share for a particular disaster; and, consequences for not making substantial damage declarations should apply to all communities and not just those that contain Mitigation Zones.

—*Under Section 204, NATURAL DISASTER MITIGATION ZONES*.—FEMA is concerned about the increased development in high-risk coastal areas and the resulting potential for increased costs for disaster assistance in these areas. While disaster assistance is currently provided to rebuild infrastructure that existed before the disaster, FEMA is reviewing whether rebuilding this infrastructure contributes to a community's willingness to rebuild, and to make unwise investments in high-risk locations. If limitations are to be placed on disaster assistance, however, this should not be done in Section 204 which applies only to Mitigation Zones. The Inspector General also suggests that provisions could be included in the amendments that eliminate flood insurance rate subsidies for secondary homes in high-risk coastal areas. Because subsidies are only provided to buildings that were built prior to the NFIP and not for new construction, this would have little impact on the rate of new development. For fiscal reasons, however, FEMA agrees that it is desirable to reduce the subsidy for second homes and other buildings that are not primary residences. This would, however, be more appropriately handled as part of a more comprehensive legislative package of subsidy reduction proposals that would amend the National Flood Insurance Act. FEMA has proposed legislation, which is currently under OMB review, to phase out this subsidy over a seven-year period.

—*Under Section 204 (a) (3) (C), AVAILABILITY TO THE PUBLIC*.—The Inspector General recommended that maps and services shall be made available to the public for a nominal fee to be established each year by the Director. FEMA believes that this is a proposal worth considering.

—*Under Section 404, HAZARD MITIGATION*.—The Inspector General recommended that Section 404 of the Stafford Act be amended to give specific guidance on property acquisition and relocation projects. While we agree that amendment to the current language regarding property acquisition and relocation assistance may be desirable, we prefer that it be moved to Title II of the

Stafford Act. FEMA has provided the Committee with suggested language for Title II to create uniform property acquisition and relocation project guidelines for all FEMA programs regardless of funding source. This language addresses most of the guidance items provided by the Inspector General. We strongly believe uniform guidance for all programs is important to reduce confusion for participating homeowners and the States and communities that implement our programs.

Further, it is important that any of this type of guidance conform to already existing Hazard Mitigation Grant Program provisions. Being overly prescriptive could preclude other important and effective mitigation measures, such as elevation projects.

—*Under Section 404, HAZARD MITIGATION*.—The Inspector General recommended that the Stafford Act be amended to reduce or eliminate Section 404 hazard mitigation assistance in favor of pre-disaster mitigation funding authority only. FEMA believes that the IG's proposal requires careful review and analysis.

FEMA believes in a two-pronged approach to mitigation: (1) institutionalize preventative planning and measures into daily activities at the community level; and (2) take advantage of the opportunities disaster events provide to reconstruct to higher standards and in safer locations. FEMA is dedicated to focusing attention to mitigation and disaster prevention before disaster strikes. However, it is also critical to seize the opportunities in the post-disaster environment to assist communities in rebuilding stronger and smarter. Section 404 assistance provides these key resources to communities after the devastation of a disaster, enabling them to reconstruct in safer locations and in a sustainable manner.

We have made great strides in improving the effectiveness and efficiency of the Hazard Mitigation Grant Program. Through our coordination with both the Inspector General and General Accounting Office, we are better able to assess and manage program effectiveness on an ongoing basis. Through our Managing State pilot initiative, we are working with States to devolve more authority and responsibility to capable States. The Stafford Act amendments support this approach. With the Inspector General's assistance, we evaluated each of the three pilot States twice. All demonstrated a high level of capability and professional, effective program management.

—*Under Section 406(c), LARGE IN-LIEU CONTRIBUTIONS*.—We believe this is an incorrect citation. The Stafford Act amendments propose to reduce the Federal contribution for Large In Lieu Contributions from 90 percent of the Federal share to 75 percent. However, the provision which the IG is addressing is not in the statute but contained in the regulations at 206.226(d). This section provides that when damages to a facility are more than 50 percent of replacement cost, the facility is eligible for assistance for full replacement. The IG would like to see this threshold raised to 75 percent. The 50 percent threshold is consistent with the substantial damage threshold of the NFIP and is also the industry standard for code upgrades. Given that three-quarters of our disasters are flood disasters, it is important to maintain consistency among FEMA programs.

—*Under Section 406(e), ELIGIBLE COST*.—The IG proposal is to specify in law the meaning of current applicable codes . . . to mean those codes in effect at the time of the disaster. In as much as we have recently (February 1999) made the same provision in our regulations at 206.226(b)(3), we have no problem with this proposal.

—*Under Section 408, TEMPORARY HOUSING ASSISTANCE*.—The IG suggests amendments to the Stafford Act which are at variance from those proposed by the Administration and endorsed, with only slight differences, by the House in HR 707. The IG's proposal requires further review and analysis. We are concerned, however, that the proposal could lead to delays in disaster assistance.

Programmatic Comparison.—The IG recommends changing Section 411, to "authorize" FEMA to provide assistance directly to individuals or families. This would seem to create an approach in which FEMA would be spending State funds. All FEMA accounting, auditing and grant management systems are set up for the purpose of the Federal government to monitor and oversee state implementation of Federal grant programs. The concept of federalism in which Federal money is provided to States to spend is well established. This proposal runs counter to these accepted norms of federalism. In addition, since the IG program does not fundamentally change the structure and makeup of these programs, the existing problems of providing two checks through two separate eligibility determination processes remains.

The approach to modification of the individual assistance authorities proposed in the Administration bill is the result of a carefully crafted plan to rationalize these

programs, improve their effectiveness, and eliminate confusion and frustration on the part of disaster victims. One of the common concerns voiced by disaster victims is the confusion created by the array of programs and agencies they must deal with to access assistance. For example, in most cases a victim will deal with FEMA for housing assistance, and then be referred to either the State for IFG, or to SBA for a loan. Many people referred to SBA are subsequently referred to the State, if their loan application is rejected due to their economic means.

We believe that one of the most useful steps we can take to improve governmental services, and to reduce the stress on disaster victims created by this system is to reduce the number of agencies a victim has to deal with, and to reduce the number of different sets of rules under which governmental assistance is administered. Our solution is to combine the temporary housing program and the Individual and Family Grant program into one uniformly administered human needs program that covers uninsured real and personal property losses. This will allow all assistance decisions to be made simultaneously and expeditiously, and with no confusion as to which program will pay for what costs (as it is now, IFG can pay for personal property as well as some real property costs. An IFG eligible applicant, therefore, could get real property repair assistance from both programs, for different parts of the house.) A combined program would allow the creation of a uniform set of rules and eligibility criteria, and would allow applicants to get the sum of assistance for which they qualified in one payment.

Since the IFG program is currently based upon the lack of repayment ability for a low interest SBA loan, we determined that this concept should be carried over into the new combined program. We believed this would be possible because of the great strides that SBA has made in accelerating their loan approval and streamlining their application process. Our primary intent was to find a way to improve program delivery in a manner that was cost neutral. We believed that requiring those that can afford to repay a loan to take out a loan is good public policy, reserving grant assistance for those that truly cannot recover without it. We anticipated that this provision would offset the cost increases due to the elimination of state participation in funding of the IFG Program.

If the combination of these two authorities into a single, integrated human needs program were only cost neutral, we believe it would be a significant improvement over the current system. We believe firmly that it will result in measurable simplification of the process and measurable improvement in the speed of delivery and effectiveness of assistance to disaster victims.

The net effect of the Administration proposal is that, while the same amount of SBA disaster loan indebtedness will be created, it will be offset by improved effectiveness and efficiency of assistance for those victims that really need it and a reduction in cost to the State. The IG's proposal does nothing to improve service to disaster victims.

—*Repeal Section 417, COMMUNITY DISASTER LOANS*.—The Inspector General recommended repealing the Community Disaster Loans section of the Stafford Act and replacing it with a grant program. FEMA had proposed eliminating the program but agrees with the Senate that a $5 million cap was more appropriate. The cap will allow the program to return to its purpose of helping small communities, through limited loans rather than uncapped grants, to recover their tax base while maintaining services. Under this limitation, recent loans such as those to the Grand Forks, ND School District would still be available.

STREAMLINING DISASTER FIELD OPERATIONS

Question. Director Witt, I understand you are looking at initiatives to streamline disaster field operations, including developing 3 levels of disasters, utilizing standardized staffing templates, and State management of small disasters. Can you describe this initiative in more detail, the cost-savings which could be achieved, whether legislation is needed, and your timeline for implementation?

Answer. During the past seven years since I joined FEMA, both FEMA and the States have been working hard to improve both our disaster response and recovery capabilities and our delivery of disaster assistance. While we can be proud of our increased capabilities to respond to disasters, we continually work toward streamlining disaster operations to achieve more cost-effective, timely service in all disasters. Each of the initiatives listed below are being performed within our current statutory authorities. Cost savings may be realized by the increased efficiency promoted with each of these initiatives.

Developing 3 Levels of Operational Responses to Disasters

FEMA is developing three levels of operational responses to disasters. In June 1998, FEMA published the "Disaster Levels, Classifications and Conditions Job

Aid", which lays out our three levels of operational response. These levels of operational response are similar to how the U.S. Forest Service classifies incidents by the complexity of the response, such as Type 2 and Type 1. At FEMA, we have three levels of operational response. In order of complexity, from least to greatest, they are:

—*Level III—Minor*.—An event/incident involving minimal levels of damage, which could result in a Presidential declaration of an emergency or a disaster. Some Federal involvement may be requested by State and local jurisdictions, and the request will be met by existing Federal regional resources.

—*Level II—Moderate*.—An event/incident involving moderate levels of damage, which will likely result in a major Presidential disaster declaration, with moderate Federal assistance. Federal regional resources will be fully engaged, and it is possible that other Federal regional offices outside the affected area may be called upon to contribute resources. Select national resources may also be utilized.

—*Level I—Massive*.—An event/incident involving massive levels of damage, with severe impact or multi-State scope. This level of event will result in a Presidential disaster declaration, with major Federal involvement and full engagement of Federal regional and national resources.

For the most part, categorizing the magnitude of an event and the resultant level of Federal operations is an evaluative tool that assists the Federal Government in preparedness activities, and aids in the evaluation and selection of appropriate resources during the disaster. The magnitude and impact of an event may change over time during the course of operations. As a result, the categorization of events and levels of operational response is a dynamic activity that occurs as part of the monitoring and assessment activities that occur continually during each emergency management phase.

Disaster Staffing Templates

The purpose of the Disaster Staffing Templates is to serve as a planning tool to aid disaster managers in staffing disaster operations more efficiently, by providing a baseline staffing range. The templates are based upon the three operational response levels, as well as the scenario in which FEMA is responding: for example, hurricanes, earthquakes, tornadoes, floods, and weapons of mass destruction. The templates will provide a baseline staffing range of numbers of employees by functional program area for the Emergency Response Team, Advance Element (ERT–A); the first 72 hours of initial operations; 24-hour operations, if required; and continuing operations until the functional program area reaches it's peak staffing. These templates will assist managers in determining what baseline personnel resources they need to deploy, and then managers will be able to augment or deactivate personnel as the situation warrants.

State Management of Small Disasters

We believe that many States are capable of managing small public assistance disasters, and are now working with States to develop a concept of operations and an implementation plan. This initiative would allow States, not FEMA, to assume primary responsibility for managing their disaster recovery operations. Participation in the program will be voluntary. We do anticipate some savings to result from streamlined operations (fewer FEMA staff and lower administrative costs), though we would expect to pay the State for reasonable management costs. It is too early at this point to project exactly what the savings will be. We plan to pilot this initiative this summer, with full implementation targeted for October 1, 2000.

FLOOD MAP MODERNIZATION

Question. FEMA is proposing a new $12 licensing fee to finance the flood map modernization initiative. Can you explain why this proposal is an improvement over the settlement fee that FEMA proposed last year? How and on whom will this $12 fee be assessed, and does FEMA anticipate that it will be passed on in its entirety to the prospective homebuyer? Please provide the basis for the $104 million estimate in revenue estimated for fiscal year 2001. What is FEMA's current estimate for the modernization initiative, and what is the basis for that estimate? What is FEMA doing to collaborate with other agencies including NASA and the Corps of Engineers to maximize existing federal resources and reduce the total price tag for this effort? How will mapping activities be prioritized?

Answer. The new fee proposal differs from last year's Mortgage Transaction Fee in three significant ways. First, this year's fee is a true user fee to be imposed on an industry that depends on FEMA-generated flood maps. Unlike last year's fee, the flood map license fee would charge the flood hazard determination industry, which

profits from the commercial use of FEMA's flood maps. Second, lenders would not need to establish an accounting mechanism to track the fee since the new fee would likely be added to the existing fee charged to lenders by map reading service providers. Third, the Map License Fee would apply to use of the standard flood zone determination form regardless of whether the mortgage is federally regulated. The Map License Fee will be assessed on the commercial use of the maps pursuant to the National Flood Insurance Act requirement for mandatory flood insurance determinations. Non-federally regulated mortgage transactions often involve completion of the standard flood zone determination form because these loans are often sold on the secondary market, which require flood zone determinations. Fourth, the Map License Fee proposal would likely limit the fee collection activity to those providing map reading services. Thus, the current proposal affects less than 300 firms, compared to the thousands of lenders that would have been impacted by the Mortgage Transaction Fee proposal. This should greatly reduce administrative expense overall, and make the collection process administratively less complex than last year's proposal. The changes reflected in the new proposal were made to address concerns raised by lenders over the Mortgage Transaction Fee proposal.

In addition, map reading service providers realize special benefits from the flood mapping program in that they use the maps for commercial purposes but only pay for a portion of reproduction and distribution costs, which amount to less than 2 percent of the cost of producing a flood map. Map modernization will allow service providers to do their jobs more precisely, consistently, and efficiently. It is uncertain whether the fee would be passed on in its entirety to the prospective homebuyer, but it seems likely that it would be, just as other expenses in the mortgage process are passed on to borrowers. Property owners significantly benefit from the use of accurate flood hazard data, because these data are used to make decisions on protecting the investment in a property.

The $104 million in revenue estimated for fiscal year 2001 is based on Home Mortgage Disclosure Act data, available on the Federal Financial Institutions Examination Council Web site. These data indicate approximately 12.9 million loan originations in 1998 and 13.8 million in 1999. The percent change in housing starts for 1999, 2000 and 2001 was used to project the percent change in mortgage originations. This projection results in 11.3 million mortgage originations in 2001. This number was multiplied by an adjustment factor of 0.77 to account for some non-federally regulated lenders choosing not to require a flood hazard determination. Thus, the estimate of loan originations generating a license fee would be approximately 8.7 million. That number multiplied by $12 yields a revenue estimate of approximately $104.4 million.

The budget finances the $134 million map modernization effort not only with the map license fee, but also with $30 million in annual appropriations from the Disaster Relief Fund. This way the taxpayers will also support a mitigation program that benefits the general public through decreased disaster relief spending.

Our current estimate for the modernization initiative is for $773 million over the period from 2001 to 2007. This figure derives from our projection of mapping needs based on community surveys conducted through July 1999. We project that 20,500 map panels (4,100 communities) need flood data updates; 60,800 map panels (12,150 communities) need routine map maintenance and digital conversion; and 13,700 map panels need to be created for approximately 2,700 unmapped flood-prone communities.

FEMA is cooperating with NASA's Jet Propulsion Laboratory, the National Imagery and Mapping Agency (NIMA) and the U.S. Army Corps of Engineers' Topographical Engineering Center (TEC) to develop new technologies for mapping the floodplains.

—FEMA is working closely with NASA and TEC in developing Light Detection And Ranging (LIDAR) and InterFerometric Synthetic Aperture Radar (IFSAR) technologies.

—With NIMA, FEMA is cooperating in the development of vegetation penetrating IFSAR at two test sites.

—With U.S. Geological Survey (USGS), FEMA is jointly funding the purchase of digital orthophotos for use with floodplain maps.

FEMA is developing the first working specifications for LIDAR, IFSAR, and LIDAR/IFSAR data fusion. FEMA also maintains active participation in the Federal Geographic Data Committee (FGDC) where standards, processes, products, and technology are shared and leveraged. One example is that we use the USGS orthophoto quadrangles as our base maps.

Development of this type of topographic information and related engineering analyses account for approximately 60 percent of flood study costs. We expect these costs to decline as map modernization is implemented. In the map modernization cost es-

timate, FEMA modeled a declining cost base with a maximum decrease of 20 percent of the unit cost for these study elements beginning in 2005. Also, we reduced the long-term maintenance costs afforded by the remote-sensing technologies and by converting the maps to a digital format.

To inventory and prioritize map update needs, we are updating the Mapping Needs Update Support System (MNUSS) database to include a ranking module. This ranking is based primarily on a benefit/cost analysis, with the primary benefit being reduced flood losses for new structures by designing and siting new buildings based on updated flood data.

COUNTER-TERRORISM

Question. The Nunn-Lugar-Domenici program is a DOD program to train first responders how to address a terrorist CB attack. From its beginning, there was an understanding that this program would transfer to another agency, and it appears it will shift to the Department of Justice. Was there any consideration of FEMA taking over that program given its established expertise in working with state/local government to deliver training and planning on these topics? Should the program shift to FEMA?

Answer. Since the inception of the NLD activity, there has been the suggestion that FEMA would be the best agency to coordinate the overall domestic preparedness program. Under its authorities, FEMA provides grants to the States and eligible local jurisdictions and for the delivery of first responder and emergency management training programs to support their terrorism-related planning, training, and exercise requirements. FEMA could assume the program under certain circumstances, including adequate resources for both manpower and funding a clearly defined leadership role.

Question. In a May 1999 report, GAO was critical of FEMA's exercise program. GAO said that most of the FEMA-led exercises were tabletops that did not involve actual movement or employment of consequence management response elements. GAO also noted that interagency exercises generally did not simulate crisis management and consequence management concurrently, yet both would occur simultaneously in an incident. Have FEMA and the other agencies made progress in these areas?

Answer. In responding to a terrorism event, FEMA will use the structures of the Federal Response Plan to implement its lead agency responsibilities for consequence management. The Plan is used in real-world situations literally dozens of times a year, and many of the same capabilities and resources will be used in a terrorism response. FEMA-led exercises up to this point have emphasized the differences from the typical natural disaster situation and focused on tailoring the response to meet those needs.

FEMA has also participated in a number of interagency exercises where both crisis and consequence management issues have been addressed. With the upcoming TOPOFF exercise scheduled for May 2000, FEMA and other agencies will have another opportunity to exercise concurrent crisis and consequence management scenarios.

Question. FEMA's request represents an increase of $5.9 million and 19 new workyears, for anti-terrorism/weapons of mass destruction (WMD) efforts. Please provide a detailed description for the record of how these new resources would be used.

Answer. With the increasing effort of the Federal government to help build and sustain a viable preparedness and response capability at the local, State and Federal levels of government, a total of (31) work-years are requested in fiscal year 2001 to support the Agency's terrorism-related programs and activities. This includes an increase in the level of effort of (19) work-years to fully support programs and activities at Headquarters and in the ten Regional Offices around the country. A list of the key activities to be accomplished with this increased level of effort includes the following:

FEMA Headquarters

Coordinate the overall FEMA involvement in terrorism-related preparedness and response activities in coordination with the Department of Justice, other Federal departments and agencies, the Congress, and the States.

Undertake terrorism-related planning and operational response enhancements under the interagency Federal Response Plan framework.

Support special events planning and preparedness, including support for the 2002 Winter Olympics in Salt Lake City, Utah.

Develop and implement the time-phased force package concept to provide expedited logistical support for the deployment of critical response resources.

Establish an initial group of six Urban Search and Rescue (US&R) Task Forces with the capability to operate in contaminated environments.

Update and maintain the Rapid Response Information System (RRIS).

Provide grants and guidance to the States to support terrorism-related planning, training and exercises.

Deliver and revise courses in the Emergency Response to Terrorism curriculum, develop terrorism scenarios for the Incident Simulations Lab and provide instructor training to support the delivery of terrorism-related courses for fire and emergency services.

Deliver and revise exercise-based courses, including the Integrated Emergency Management Course on the Consequences of Terrorism.

Support terrorism-related exercises, including a major consequence management exercise, conduct of tabletop exercises, and support for other Federal terrorism exercises.

Provide support for the development of terrorism-related materials to support Congressional and legislative affairs activity.

Conduct emergency public information planning activities to keep the public informed during a terrorism incident.

Develop and disseminate terrorism-related policy regarding terrorism-related programs and activities.

FEMA Regional Offices

Support terrorism-related planning, training and exercise activities in coordination with other regional-level offices of Federal departments and agencies.

Administer and manage the terrorism consequence management grant assistance program to the States in support of terrorism-related planning, training, and exercise activities.

Work with the States to help ensure that terrorism-related plans and capabilities are developed and available for response.

Serve as the primary FEMA conduit to the States to keep them informed of Federal initiatives and activities.

Support continuing implementation of the Nunn-Lugar-Domenici Domestic Preparedness Program activities.

Maintain an interagency forum to support Federal coordination of terrorism-related preparedness activities, in conjunction with other departments and agencies and the States.

FIREFIGHTER GRANT PROGRAM

Question. FEMA is requesting $25 million for a new grant program for firefighter equipment in needy communities. What is the rationale for this program, and how does it relate Forest Service's fire assistance program that provides equipment to local fire departments? Was this program recommended by the Blue Ribbon Panel report of October 1998? Are there higher priority activities recommended by the Panel that FEMA has not implemented or requested funding for?

Answer. The rationale for the proposed $25M Firefighter Health and Safety Grant Program is to enhance firefighter health and safety because fire fighting continues to be one of the nation's most dangerous professions. In 1999 alone, more than 100 firefighters lost their lives while on duty. In addition, approximately 90,000 firefighters are injured on the job each year. As fire departments are being called on to provide an ever expanding and more complex array of skills such as services related to hazardous materials, search and rescue, emergency medical, and counter terrorism, local governments and fire departments are encountering severe budget challenges. A federal firefighter health and safety grant program will allow financially challenged jurisdictions and fire departments to address issues that could contribute to a safer and more efficient working environment for the firefighter and safer communities for the American people.

We understand that the Forest Service Volunteer Fire Assistance (VFA) Program is available only to small rural communities, is focused on operational firefighting and includes a 50/50 matching fund requirement. The proposed FEMA program targets firefighter health and safety and is available to needy departments in communities of all sizes. In addition, the proposed program has a broad focus and is designed to include training, staffing, equipment and wellness programs. FEMA's United States Fire Administration will administer the program at the national level and grants will be made directly to the needy departments. The VFA program is managed through the State Foresters, and the criteria and administration may vary by State.

Recommendation #31 of the Blue Ribbon Panel of October 1998 report calls for ". . . the creation of a federal grant/local matching program to enable fire/EMS de-

partments to acquire training resources, new technology, specialized equipment and safety resources." Since the fire problem in the United States is multifaceted, we are unable to determine if there are higher priority activities that should be addressed first. However, three major fire service organizations that were represented on the Blue Ribbon Panel have consulted on the development of the proposed grant program for 2001. These groups are the International Association of Fire Chiefs, the International Association of Fire Fighters, and the National Volunteer Fire Council.

DISASTER RELIEF FUND ESTIMATES

Question. Last year FEMA did not accurately identify existing funding needs for disaster relief, and it came to the Subcommittee's attention in May that the agency had underestimated projected spend-out rates resulting in a shortfall of almost $1 billion. The need for this supplemental funding was due in part to a problem with the budget methodology that FEMA was using, which did not take into account the fact that FEMA had been obligating disaster dollars at a much faster rate than it had been historically. What steps has FEMA taken to revise its budget methodology, and how is FEMA monitoring the needs associated with the Disaster Relief Fund to better ensure that it is using appropriate rates for estimating?

Answer. Around the 15th of each month, FEMA submits a report to the appropriations subcommittees on the status of the Disaster Relief Fund (DRF) as of the end of the previous month. This report shows availability, actual obligations, unmet requirements for disasters that have occurred to date as well as a projection for disasters in the remaining months, an estimate for obligations during the remainder of the fiscal year, and estimates for requirements and obligations in the next fiscal year. Prior to last April's report (submitted on May 20), FEMA used one consolidated formula to predict obligations for the remainder of the fiscal year. This formula, based on 5-year averages with adjustments for Northridge, consisted of the following:

—58 percent of total current year requirements, including the projection for disasters in remaining months, adjusted for obligations to date;
—52 percent of total requirements as of the beginning of the fiscal year from all prior year disasters, adjusted for obligations to date and Northridge;
—estimated Northridge obligations for the remainder of the fiscal year; and
—unobligated funds budgeted for disaster support.

Starting with the April 30 report, FEMA decided to break out obligation estimates for the remainder of fiscal year 1999 into the various components in order to better reflect the activities of the disaster close out teams who were concentrating on those disasters that occurred prior to 1998. When this was done, it became very obvious that the amount forecast for 1999 obligations from all prior year disasters, particularly 1998 declarations, was inadequate and that the shortfall in projected obligations had been masked by using a single formula. FEMA then refined the methodology used for estimating obligations. In this April 30 report, the amount of obligations forecast for the remainder of the year for prior year disaster declarations was changed as follows:

—for 1989–1997, 95 percent of total requirements as of the beginning of the fiscal year, adjusted for obligations to date and Northridge; and
—for 1998, 65 percent of the total requirements as of the beginning of the fiscal year, adjusted for obligations to date. During the remainder of fiscal year 1999, obligations from the 1998 disaster declarations continued to increase at an unprecedented rate. Each month FEMA continued to increase the percentage for obligations from 1998 declarations until the percentage used in the August 31 report reached 86 percent.

For current year disasters, FEMA developed separate percentages for disasters that had occurred and estimates for disasters during the remainder of the year. These percentages were based on 1997 and 1998 actual obligations for declarations in each month versus total projected costs for those disasters. As each month of the fiscal year goes by, these percentages either remain the same or decrease. For the April 30 report, these percentages were as follows:

—70 percent for disasters that had occurred to date; and
—40 percent for estimated requirements for the remainder of the fiscal year.

For the fiscal year 2000 reports, FEMA added 1999 actual data into percentages used to project obligations from current year disasters on a monthly basis. In addition, FEMA revised percentages used for prior year data in the fiscal year 2001 section of the monthly report. The percentage used for obligations forecast from 2001 declarations remained at 58 percent of requirements in the first year of a disaster.

FEMA continues to monitor its estimates for obligations for reasonableness. However, forecasting disasters and projecting when obligations from these disasters will

occur remain inexact sciences, at best. One very real variable in the estimates continues to be the lack of a discernible pattern when disasters occur. FEMA projects remaining requirements for disasters based on the remaining weeks in the fiscal year pro rated against the five year average obligations for disasters. For both fiscal year 1998 and 1999, the bulk of requirements from disaster declarations did not occur until September. In other years, the big disaster or disasters have occurred earlier in the year (most notably the Northridge earthquake in January or even the Loma Prieta earthquake in October). Also, projections in the early stages of large disasters tend to vary, making it more difficult to forecast obligations. Nevertheless, FEMA continues to explore ways to improve its ability to forecast requirements and obligations from disasters.

ACCURACY OF DISASTER COST DATA

Question. GAO has found potential problems in the obligation data provided to FEMA's Regional Offices for use in preparing the Quarterly Disaster Financial Status Report. This report represents the ongoing record of the financial status of each major disaster by program. The quarterly reports get compiled into a national database which forms the basis for FEMA's estimate of total federal remaining costs for each open disaster, as well as FEMA's budget submissions and other congressional reports. Obligation data errors cause inaccurate calculations in a disaster's total estimated federal costs and the remaining costs. What steps has FEMA taken to identify the source(s) of data errors, and why did FEMA fail to correct these data errors when it first became aware of them? What actions has FEMA taken to ensure that future Disaster Financial Status Reports are correct? To what extent have errors in the Disaster Financial Status Reports impacted FEMA's budget submissions?

Answer. FEMA is taking a number of actions to ensure that obligation data, and the resulting projected and remaining cost data, are accurate. One of the first steps was to identify exactly why the obligations data used for the Disaster Financial Status Report (DFSR) did not always agree with data from other automated and manual systems. The cause of some of the reported differences was due to comparing data generated at different times (timing differences). The cause of the other discrepancies, however, was much more difficult to determine. Identifying which data was inaccurate (i.e., the data extracted from the Integrated Financial Management System (IFMIS) for the DFSR, or the data the regions use from various systems) was a time consuming and labor intensive task that required looking at transactions and records for over 500 major disaster declarations, 280 fire suppression agreements, and 60 emergencies totaling almost $28 billion over 11 years and spread across nearly 200 object codes and 350 organization codes. We recently isolated the problem and began an extensive review of the methodology used to extract the obligation data from IFMIS. A new method was developed and is being rigorously tested. So far, it appears the new methodology is generating accurate obligation data.

Last summer FEMA began intensive work on a new system to collect projected costs. Recognizing the limitations of the electronic spreadsheets used for the current DFSR, FEMA began developing a new system using the Agency's standard Microsoft Access Database software. The new system will give regional personnel more time to review and analyze the validity of the data by freeing them from much of the data entry work, implement certain business rules to ensure the validity of data when it is entered rather than relying on subsequent reviewers to identify problems, and improve the timeliness of the data so that errors are more apparent.

As the new system is introduced to the regional offices, Office of Financial Management personnel from the Disaster Closeout Teams and the Disaster Finance Center will work side-by-side with regional personnel to reconcile any differences in the obligation data extracted from IFMIS with the various records maintained in the region. Any needed changes will be made to IFMIS or the regional systems. This process started in mid-March at FEMA's Philadelphia Regional Office. The differences that were identified were researched and, for the most part, will require making "adjusting" entries into the regional records. One discrepancy, appeared to be the result of a transaction being entered into the regional records, but not into IFMIS—a problem associated with managing the paper flow rather than the new methodology used to extract the data from IFMIS.

The introduction of the new DFSR will continue region by region and include centralized training at workshops or conferences to familiarize the largest possible number of personnel and further reinforce the importance of accurate data. We plan to visit FEMA's New York and Denton Regional Offices starting in April. After the new DFSR is fielded to all regions, the Disaster Closeout Teams will continue to work closely with the regions and the Disaster Finance Center to identify and resolve any subsequent discrepancies in obligations.

The extract report of obligations, provided to the regions on a quarterly basis, is just one of the tools that the regions use to develop the DFSR. Even though FEMA is still in the process of quantifying the effect of any identified problems in the extract report, the magnitude of errors found to date indicates that any effect on projections of remaining costs and the budget submission is about one percent.

PROBLEMS WITH FEMA'S INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEM

Question. FEMA's Office of Inspector General and the GAO reported on several occasions that FEMA's Integrated Financial Management Information System (IFMIS) lacks the ability to generate the reports necessary to properly manage the Disaster Relief Fund. The preliminary results of an ongoing GAO audit indicate that this shortcoming has contributed to the erroneous obligation data previously mentioned. Specifically, the auditors noted that because of this shortcoming, FEMA must extract and manually manipulate the IFMIS obligation data that the regional offices ultimately use to develop total estimated federal costs for individual disasters. What is FEMA doing to correct this shortcoming in the system's reporting capabilities?

Answer. FEMA acquired the Integrated Financial Management Information System (IFMIS) from the Digital Systems Group in fiscal year 1994, and began implementation in fiscal year 1995. It was selected from the mandated group of commercially available core financial management systems that had been approved by Treasury and the GSA for acquisition by Federal agencies. This approval was granted on the basis of demonstrated satisfaction of government requirements, including reporting requirements. IFMIS has been on the approved list every year since then, and has been approved by the JFMIP under its new process.

For the last six years, FEMA has received unqualified audit opinions on its annual financial statements of which the last two were consolidated Agency-wide statements, which include the Disaster Relief Fund. For the last four years, those statements have been produced based on reports from IFMIS. This suggests, at least, that the data in the system is reliable, even if the "canned" reports do not readily support different management approaches. While the statements on internal control do cite problems with the lack of reconciliations and oversight, the basic reports are not questioned.

IFMIS is a classical funds control and accounts payable system. This is largely acceptable because FEMA manages each appropriation that it controls as if it were a single fiscal year appropriation. That means that we issue new allocations covering only the current budget fiscal year, regardless of whether it is a single or multi-year appropriation. Therefore, the management of all funds is restricted to the current year, not a multi-year effort based on some other element of an accounting coding structure. This is fine for funds control purposes, but it does complicate our ability to report on a consolidated basis over a period of years.

When IFMIS was implemented for the Disaster Relief Fund (DRF), in April of 1996, data was converted from the predecessor systems at current unliquidated obligation balances. This is what was required to be able to assess available allocations, obligated balances and evaluate the propriety of additional payments, which was adequate for most of FEMA's appropriations. Even at that, several million transactions had to be converted to IFMIS. However, even this level of detail was insufficient to provide historical information required for reporting purposes from the DRF.

Over the years, we have refined our approach to capturing data to support the necessary Disaster Relief Fund reporting requirements. We have built history records in IFMIS to support the balances that were converted from the predecessor systems. We have had several task forces that attempted to reconcile all the varying sources of data used by Headquarters, the Regions, and others. However, we have not always modified our approaches to capturing data and reporting it for the DFSR. We feel that the "new" method for extraction of data mentioned above for the DFSR will satisfy the current requirements.

Data will continue to be extracted from the production IFMIS database in order to put it into an environment that allows for "what-if analysis" and projections for events that do not yet constitute accounting transactions. These activities are not appropriate for an official accounting environment. However, it is expected that the manual manipulation previously required to move obligations from one column to another for the DFSR will no longer be required. It occurred previously due to shifting definitions of object classes or the addition of new object classes that did not fit the previous columnar structure of the DFSR.

PROBLEMS WITH DATA TIMELINESS IN DRF

Question. Because FEMA information systems cannot provide data on the total estimated federal costs of each disaster, the agency must rely on its Regional Offices to update the Quarterly Disaster Financial Status Report with those estimates. Also, because FEMA information systems cannot provide data on obligations to date by program for each disaster, the data must be extracted and manipulated before it is forwarded to the Regional Offices. We understand that, as a result of the time needed to extract, manipulate, and ship that data to and from the Regions, the Disaster Financial Status Reports may contain obligation data that can be, at times, three months out of date. What actions can FEMA take to reduce this delay in order to obtain and report real time data?

Answer. The FEMA Chief Financial Officer (CFO) established the current Disaster Financial Status Report (DFSR) reporting process in December 1995. The quarterly submission dates were timed to provide a "snapshot" of the status of disaster funding estimates (projections) and remaining costs (projections less obligations "as of" the report period) at critical points in FEMA's budget development (e.g., submissions to OMB and Congress and for appropriations hearings). In order to reduce a reporting burden on the regions, and to allow for more in-depth analysis, the CFO determined that quarterly reports were sufficient for budget forecasting. However, the projections are updated with estimates for new declarations that occur between the quarterly reporting periods.

The regional disaster program officials, Federal Coordinating Officers, and Regional Directors are ultimately responsible for estimating what a given disaster will cost over the life of that disaster. No agency information system could automatically calculate those costs without field office input, and the input must come from the officials who manage the disaster. The regions maintain an ongoing record of their projection data using an Excel Spreadsheet, which they forward to Headquarters for compilation into a national database (i.e., DFSR) for reporting purposes. The obligations data sent from Headquarters is but one tool that the regions use to calculate their projections and remaining costs. The regions primarily use program data available to them to develop their cost estimates for the major disaster program activities, i.e., Public Assistance, Individual Assistance, Individual and Family Grant, and Hazard Mitigation programs. The CFO relies on the regional program expertise to develop the cost estimates, and the DFSR process provides the reporting mechanism for the regions to compile disaster estimates for all program and administrative costs.

Last summer, the CFO's office began an intensive effort to correct identified shortcomings in the current DFSR reporting process. The process is time-consuming and susceptible to human error. The agency has developed a user-friendly version of the DFSR using Microsoft Access. This new system will rely on a shared database extracted from IFMIS and maintained in a central location. The regions will be given password-protected access, based on need, to make modifications to the central database. The new system will allow the regions to utilize the tool at any given time, and will facilitate the reconciliation of any data discrepancies between the regions and headquarters. With the simplicity of the new system and improved analytical tools, the Agency plans to maintain the DFSR on a monthly basis, which will lead to a more frequent updating and analysis of disaster cost estimates. The Agency plans to field the new system, in a pilot status, with selected regions beginning in May 2000.

DRF SET-ASIDES PROPOSED

Question. FEMA proposes two new set-asides within the disaster relief fund: $30 million for flood map modernization and $50 million for repetitive loss property buyouts following disasters. Please describe the rationale and the authorization for these set-asides. Will the repetitive loss buyouts be limited to flood-insured properties?

Answer. Under FEMA's current Stafford Act authority, DRF money may be used only to generate flood recovery maps to support hazard mitigation activities following a flood. This includes collecting field data, conducting engineering analyses, and preparing flood maps for community use; it does not include updating the Flood Insurance Rate Maps (FIRMs).

We have asked that our authority under the Stafford Act be broadened to allow DRF monies to be used to develop up-to-date, modernized FIRMs, fully compliant with National Flood Insurance Program requirements, for areas affected by Presidentially declared disasters. Developing flood recovery data to support hazard mitigation activities within the present authority has a supplementary benefit in that these flood recovery data comprise a significant portion of the effort necessary to up-

date and modernize the FIRMs. The requested authority would allow the remainder of the work also to be completed under the DRF.

In the immediate aftermath of a flood, field data (e.g., high water marks, physical conditions) would be collected and engineering analyses prepared. These would be provided to the community so that rebuilding activities, and also future new development, could be based on the most accurate, up-to-date data. Further, it is imperative that higher flood elevations than those adopted by the community be formally acknowledged so that they can be incorporated into existing floodplain regulations. The information is also used to identify potential hazard mitigation projects and to conduct benefit/cost analyses for mitigation projects.

DRF funding, in addition to other funding sources, is appropriate because:

1. The flood recovery scenario provides a unique opportunity, outside the normal flood map update and prioritization process, to gather data that exist for only a short time after the floodwaters subside.

2. In the immediate recovery environment, those that have suffered property losses are anxious to rebuild their homes as quickly as possible. Thus, there is a limited window of opportunity to gather the data, provide these property owners with updated flood data and positively guide their rebuilding design decisions.

3. Existing funds cannot be reprogrammed quickly enough to respond to post-disaster needs. Planned contracts have already been funded, and the DRF will provide needed flexibility to develop data for disaster-affected areas.

Using DRF funding also makes funding of flood hazard data collection and analysis more equitable. Through DRF funding, all taxpayers will participate in the costs, which is appropriate because all taxpayers will benefit through the long-term reduction of disaster costs.

The $50 million authorization to mitigate repetitive losses would be directed at National Flood Insurance Program (NFIP) insured properties following disaster declarations. FEMA has identified 10,000 repetitive loss buildings that have the greatest risk of flooding and which account for about $65 million in NFIP claims annually. These properties have either four or more losses or have two to three losses that when added together exceed the building's value.

The $50 million will fund the acquisition, relocation, elevation, of approximately 1,160 of the 10,000 repetitive loss buildings that FEMA has identified as having the greatest risk.

MITIGATION ISSUES

Question. Last August, GAO issued a report on opportunities for FEMA to improve cost-effectiveness determinations under the Hazard Mitigation Grant program. FEMA agreed with the report's recommendations and noted that they complement activities already under way at the agency. What specific actions have been taken to implement each of the recommendations in the GAO report? What is the status of the independent study the Subcommittee called for to assess the future savings resulting from the various types of mitigation activities?

Answer. The GAO report made three recommendations.

First, that "the Director of FEMA should establish an analytical basis supporting the cost-effectiveness of acquiring substantially damaged properties in the floodplain". This is related to the Agency's policy of exempting from benefit-cost analysis structures that meet certain criteria. In September 1999, FEMA completed a study of approximately 2,000 such structures nationwide, about ten percent of the total number of acquisitions the Agency has funded. Analysis of structures included in the study produced a benefit-cost ratio of 2.21. This means that, for the sample, an expenditure of one dollar is expected to produce $2.21 in savings. The study found that some individual properties were not cost beneficial, but the projects in the aggregate were. Since the study was completed, FEMA has also issued a memorandum asking regional offices to provide data for all projects of 50 or more structures that meet the exemption criteria so that more studies can be done.

Second, the GAO recommended that FEMA conduct periodic reviews of projects after they have been implemented to determine if they are cost-effective. In response to this recommendation, FEMA has begun studies of projects funded in three categories of projects that are now exempt from benefit-cost analysis: those funded through the "5 percent Initiative" and the "Tornado" and "Planning" exemptions. One study includes the first two categories. It will be completed by the end of August 2000. The results will be provided to the GAO, Congressional oversight committees and the FEMA Inspector General.

For the "Planning" projects exemption, the FEMA Office of the Inspector General and the Mitigation Directorate are engaged in a joint study that will evaluate the overall effectiveness of local mitigation planning initiatives funded by the Hazard

Mitigation Grant Program (HMGP) and Flood Mitigation Assistance (FMA) program. This study will assess the quality of mitigation projects completed in the context of comprehensive mitigation plans, and determine how planning can contribute to the efficiency of disaster recovery operations. We expect this study to be completed by December, 2000.

Third, the GAO recommended that FEMA should "provide the best available data for analyzing the cost-effectiveness of proposed flood hazard mitigation projects" by conducting post-disaster hazard identification and by making the Agency's data on past insurance claims more readily available to analysts. As noted in FEMA's initial response to the recommendations (in the "60-day Letter"), the Agency has two initiatives underway in the area of hazard identification, the Map Modernization Program and the Cooperating Technical Communities (CTC). Both of these are ongoing, long-term projects. In the area of claims data, the Agency made the Federal Insurance Administration's claims data available to FEMA employees on a web site in summer, 1999. The Headquarters Mitigation Directorate issued a memorandum to all its regional offices informing them about the web site. This was done in February, 2000.

SUBSTANTIAL DAMAGE RULE

Question. The IG reported in a September 1999 report that NFIP communities were not effectively identifying potentially substantially damaged structures. Only 106 structures were declared in a sample of 603 structures identified as substantially damaged using insurance claims data. As a result, mitigation efforts (e.g., the requirement to meet codes and standards) were not taking place. What is FEMA doing to help NFIP communities do a better job identifying substantially damaged properties and enforce the substantial damage requirement?

Answer. Along with providing ongoing technical assistance and monitoring NFIP community compliance both in the pre- and post-flood disaster environment, we have a variety of tools to improve enforcement of the 50 percent rule. The role of the community is critical to the enforcement of the 50 percent rule because the authority to regulate floodplain development rests with the local government. Claims data is just one tool that we offer communities to assist them in identifying possible substantially damaged buildings. There may be legitimate differences between what the communities determines as the cost of repairs and market value compared to claims data values.

Post-Disaster Guidance

FEMA's regional staff undertake a multi-faceted, multi-phased response to provide technical assistance to NFIP communities to ensure they have the necessary tools and guidance to administer their floodplain management ordinance and to ensure that citizens with flood-damaged buildings are protected in the future. This assistance includes:

—Initial telephone contacts with local officials in the immediate disaster response period.
—One-on-one meetings and/or workshops with local officials and workshops to provide detailed guidance and training on the substantial damage requirement.
—Opening Disaster Recovery Centers to provide assistance to the general public on retrofitting techniques and on the available mitigation programs.
—Locating Mitigation staff in the Disaster Field Office to provide ongoing technical assistance throughout much of the recovery period.
—Extensive public outreach on our mitigation programs and on mitigation success stories to the general public through press releases, FEMA's web site, and through special events including those sponsored by the State or communities.

We have specialized tools that we provide to local officials and assist them in their use during the recovery period to help them identify substantially damaged buildings:

—Training on the use of the Residential Substantial Damage Estimator, a computerized program to help communities estimate building value and damages.
—Preliminary Damage Assessment forms, completed by insurance adjusters during the initial adjustment process provide an estimate of building value and damages on individual buildings. We will be implementing procedures this spring to provide this information more efficiently to local officials.
—Implementing this spring a "Quick Claims" process that will capture initial contacts from the insured about damages. While the information will not be as detailed as the Preliminary Damage Assessment form, it will provide preliminary information on damages earlier. This information will help communities identify areas that have been damaged.

Financial resources provide opportunities to communities to break the cycle of damage and repair:

—The Hazard Mitigation Grant Program (HMGP) available following a Presidentially declared disaster.

—The Flood Mitigation Assistance program which provides pre-disaster mitigation assistance.

—Since June 1997, the $15,000 Increased Cost of Compliance (ICC) coverage for insured buildings that have been determined by the community to be substantially damaged. This past year we have been assessing this coverage and making appropriate adjustments, including increasing the amount of the coverage to $20,000 effective May 1, 2000. We will be implementing several activities to improve training and education on ICC, outreach and marketing of ICC, especially to the policyholder, local officials, and the adjuster, and operational processes to ensure ICC is integrated into the disaster operation and used effectively to complement the HMGP.

Pre-Disaster Guidance

FEMA conducts extensive training on the NFIP floodplain management requirements, including the substantial damage requirement.

—NFIP week long course where over 150 local officials are trained each year.

—Numerous workshops for hundreds of local officials throughout the country.

—Recently deployed Independent Study course, which includes detailed guidance on making substantial damage determinations.

FEMA has published extensive guidance on the substantial damage requirement and on retrofitting flood damaged property including: "Answers to Questions about Substantially Damaged Buildings" and a new "Homeowners Guide to Retrofitting".

FEMA and State Floodplain Management Coordinators also conduct hundreds of Community Assistance Visits (CAV) each year, which is a scheduled visit with individual communities to assess their floodplain management program and to provide guidance and assistance in implementing effective mitigation measures. A CAV is generally conducted in communities that experienced a flood disaster several months after the event to assess the community's effectiveness in implementing its floodplain management program in response to the disaster and provide technical assistance if appropriate.

RULEMAKING IMPROVEMENTS NEEDED

Question. In reviewing the public buildings insurance rule, GAO found some significant shortcomings in FEMA's internal rulemaking processes. For example, FEMA hadn't designated a regulatory policy officer and its procedures governing the formulation of proposed rulemaking hadn't been updated in a decade. What is FEMA doing to address these internal problems? Please describe for the record how FEMA will respond to each of GAO's recommendations in the report "Issues Related to the Development of FEMA's Insurance Requirements."

Answer. The following are GAO's recommendations and FEMA's responses:

GAO Recommendation: The Director should designate a Regulatory Policy Officer as required under Executive Order 12866 and charge that individual with responsibility for being involved at each stage of the rulemaking process

Response: Director Witt appointed the General Counsel as the Regulatory Policy Officer for the Agency on February 29, 2000.

GAO Recommendation: FEMA should update its external regulations and internal written guidance and manuals governing the rulemaking process to reflect the current requirements contained in federal laws, executive orders and OMB guidance.

Response: FEMA's Office of General Counsel has developed updated regulatory guidance. This guidance is in draft form and is being circulated within FEMA for comment.

GAO Recommendation: The Director should monitor FEMA's compliance with relevant federal laws, executive orders and OMB guidance governing the rulemaking process.

Response: As a result of constructive dialogue with GAO and OMB, our Regulatory Policy Officer is working to ensure compliance with the relevant federal laws, executive orders and OMB guidance governing the rulemaking process.

NEW HEADQUARTERS LOCATION

Question. FEMA's budget includes almost $24 million to begin the process of relocating. Please provide a complete break-out of the budget request, as well as the fiscal year 2002 costs we may anticipate.

Answer. The following shows the breakdown of all the relocation costs (in thousands of dollars). All estimated costs are based upon the top range of square footage allowed, i.e., 339,247 rentable square feet. FEMA has worked closely with the General Services Administration (GSA) in developing these estimates:

Move costs	$1,414
Office space (telecom) @ 6.94 per square foot (sq.ft.)	1,963
Customization allowance above Tier 3 (build out)	1,130
ADP/Special @ $17.45 per sq. ft. for 55,150 sq. ft	962
National Interagency Emergency Operations Center (NIEOC)	15,048
Sensitive Compartmented Information Facility (SCIF) area @ $120 per sq. ft. for 15,000 sq. ft	1,800
Level IV Security Requirements	1,500
Systems furniture (including installation)	5,566
GSA Administrative Fees (fiscal year 2002)	3,077
Total Relocation Project Costs	32,460
Basic security increase (Federal Protective Service) @ .16 per sq. ft. ($54,280 for new space less $40,367 for current space)	4
Projected rent increase (projected new rent costs, $14,587,621 less fiscal year 2000 estimate of $8,290,000 = $6,298,000)	6,298
Net Cost of Move	38,772

Of the total costs listed above, the 2001 budget submission includes the following:

[In thousands of dollars]

Office Space (Telecom)	1,963
Systems Furniture/Installation	5,566
Customization Allowance	1,130
ADP/Special Space	962
NIEOC	10,000
NIEOC Furniture	707
SCIF Area	1,800
Level IV Security Requirements (initial)	1,500
Total	23,628

Estimated costs for fiscal year 2002 include the following:

[In thousands of dollars]

Move Costs	1,414
NIEOC Equipment	4,341
GSA Administrative Fee for Project	3,077
Total cost increases other than rent and security [1]	8,832

[1] Projected rent and security cost increases for the new facility total $6,312,000. If FEMA remains at its current location, lease extension will undoubtedly be at a much higher rate than the current lease (GSA reports that sometimes the rent doubles). GSA suggested that FEMA estimate the lease extension at $43.00 per sq. ft. for fiscal year 2002. Full year lease extension estimated costs could be as high as $2,622,308 over current budget. All estimated costs are subject to the GSA procurement process, which could range from best case to worse case depending upon building procured and when the build out is completed.

Please note that the fiscal year 2002 costs are preliminary and may change prior to submission of the fiscal year 2002 budget.

SUBCOMMITTEE RECESS

Senator BOND. I will now recess the subcommittee meeting. Thank you.

[Whereupon, at 10:53 a.m., Wednesday, March 1, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENTS OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT AND INDEPENDENT AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

THURSDAY, MARCH 23, 2000

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

The subcommittee met at 9:39 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Christopher S. Bond (chairman) presiding.

Present: Senators Bond, Stevens, Mikulski, Leahy, and Lautenberg.

ENVIRONMENTAL PROTECTION AGENCY

STATEMENT OF HON. CAROL BROWNER, ADMINISTRATOR

ACCOMPANIED BY:

W. MICHAEL McCABE, ACTING DEPUTY ADMINISTRATOR
MICHAEL W.S. RYAN, ACTING CHIEF FINANCIAL OFFICER

OPENING STATEMENT OF SENATOR CHRISTOPHER S. BOND

Senator BOND. Good morning. The Subcommittee on VA–HUD and Independent Agencies will come to order.

This morning we take testimony from the Environmental Protection Agency on the administration's fiscal year 2001 budget request, and it is a pleasure to welcome EPA Administrator Carol Browner, Acting Deputy Administrator Michael McCabe, Acting Chief Financial Officer Mike Ryan, and the rest of the EPA team.

We have a great number of issues to discuss this morning, many of which focus on our concern that the EPA is not attending to core management responsibilities.

There are votes at 11 o'clock. I have a feeling that we may not finish up by then, so be prepared to stay with us and we will try to get through as many of them as we can.

Early this month the Inspector General was unable to give EPA a clean opinion of its fiscal 1999 financial statements. According to the Inspector General, EPA failed to provide complete, accurate and reliable information by the agreed upon dates. Moreover, none of the recommendations made by the IG 1 year ago to improve financial management at EPA have been fully addressed.

What does that actually mean? It means the government auditors could not even issue a judgment on the condition of EPA's

books, as in how much money was spent, for what purpose, who spent it, what did it do.

I am very much concerned about the Agency's sloppy financial management practices and whether they exemplify a systemic problem where Agency leadership does not seem to rank sound management procedures very high. EPA's unwillingness to make a priority of critical management challenges, many of which have been cited by the Inspector General and GAO for years, such as protecting EPA's computer system from hackers, effective oversight of billions of dollars in grant funds, and improving the reliability of data information systems, raise significant questions about the Agency's accountability to the taxpayer and its stewardship of resources.

But equally disturbing is the finding of GAO that, contrary to the well-publicized statements by this administration, that reinvention has not cut the paperwork burden by more than 26 million hours per year, that in fact not only have the public claims been vastly overstated, but even using EPA's own flawed data and overstated savings that the actual burden imposed on the public has risen at least 10 million hours, from 109 million hours of paperwork burden in fiscal year 1995 to a total of 119 million hours in fiscal year 1998.

The true increase we now know must be even larger. One example tells the tale. The goal of the Office of Water regarding pollution discharge monitoring, the goal of reducing 4.7 million hours of paperwork burden, has over time transformed itself into an accomplishment, even though GAO now tells us that EPA officials admit the actual results were significantly less reduction, that in fact they could not even say how much, if at all, the burden was reduced.

Only in Washington could we have an agency confuse a goal with an accomplishment. It is like saying that the goal of my basketball team was to win the Final Four. Unfortunately, they got knocked out in the first round, but under this kind of accounting we would come back and say that next year, that they achieved their goal of winning the Final Four because that was the goal. It does not make sense to me or people in the real world.

Frankly, Madam Administrator, when just this one example is 25 percent of the claimed savings, the whole reinvention effort is beginning to look like an effort to reinvent the facts. We cannot accept that.

We cannot accept the fact that the EPA has been laggard in addressing computer security concerns raised by the IG and the GAO several years ago, leaving vulnerable to hackers confidential business information and putting at risk EPA's core financial systems. GAO in a recent review found EPA's information security program completely ineffective, with mission-related and financial programs riddled with security weaknesses. The GAO found many instances of hackers penetrating EPA's computer files without EPA even knowing about it.

Correcting this problem should not be rocket science. It takes some high level attention, a long-term commitment, and the use of resources now available. I understand that steps are being taken to implement proper firewalls and I congratulate you for that.

Ms. BROWNER. They are installed. They are in.

Senator BOND. That is good to know. It seems to have come about, however, only after the media attention initiated recently.

In addition, while EPA seems to be responding to the immediate crisis, there does not appear yet to be any plan for addressing and making a priority of long-term computer security challenges, such as putting in place an effective testing and monitoring program.

With respect to the issue of environmental data information systems generally, for the third year the Inspector General has listed this issue as a key management challenge. EPA's data systems have been criticized as providing data that is often inaccurate, inconsistent, and unreliable. While EPA did establish an Office of Environmental Information, EPA still does not have an action plan that would address specifically how they will deal with the myriad of information management issues that need attention. We were promised that plan 2 years ago.

An overarching vision of how we address the myriad of information management issues is critical. It seems very little has been accomplished in the last year other than reacting to the crises, as we saw when EPA shut down its web site a few weeks ago owing to the computer security fiasco.

Moving on to the issue of EPA staffing, as you know, the fact that EPA's staff has been growing while States have been picking up more and more of the responsibility for direct implementation of environmental requirements and while the rest of the Federal Government is downsizing led us last year to include in the appropriations bill a limitation on total EPA staffing and to request a GAO review.

GAO's preliminary findings, which will be included in testimony for the record today, are troubling. GAO found that EPA has no work force plan strategy to determine the number and types of people needed to carry out strategic goals and objectives. GAO says that EPA has not assessed changes in its work load resulting from factors such as productivity improvements and delegation of responsibility to States, and GAO further says that EPA has not made progress toward its stated goal of developing a process for continually monitoring and assessing its work force in light of changes in its internal and external environment.

GAO also tells us that we do not have reliable information as to what EPA's 18,000 employees are doing, raising the accountability question once again.

Now, EPA has toyed with this issue with attempts to gain a better understanding of the work force requirements, but, according to GAO, "They have not received the resources and senior management commitment needed to bring them to fruition and they have fallen short of their objectives."

One final example of continuing management problems. The Inspector General continues to raise serious concerns about EPA's oversight of grants, which amount to more than half of EPA's total budget. Back in 1996 the IG testified that EPA grantees too often did not provide the products and services specified in the grant agreements, meet the performance goals, or comply with procurement requirements. Today the problem has not gotten much better.

The IG has noted concerns about inadequate monitoring of grantees to ensure proper performance, noncompetitive grant awards, and grants being issued when contracts were more appropriate. A recent audit found that an EPA headquarters office and EPA regional office awarded grants with identical work plans to the same recipients. The offices expected different work products, but the grantee thought one grant supplemented the other and EPA offices did not respond to the grantee's requests for clarification. This means that the recipient received money twice for the same work and EPA did not receive the product expected.

The IG also found examples of grantees who did not complete the work promised, but still received all the funds. Now, that is a problem and that is not acceptable.

The IG's testimony before a House committee last fall sums up this situation: "Without determinations of cost reasonableness, the Agency cannot demonstrate that the level of funding provided to the grantee is appropriate for the work to be performed. Without monitoring performance, the Agency cannot determine whether grantees are successfully carrying out the purposes of the grants. By diverting grant funds to Agency responsibilities, fewer dollars are available to obtain the benefits of grantee performance. Without adequate justification for noncompetitive awards, the Agency appears to inappropriately favor a single recipient."

It should not be too much to ask that we know where the dollars are going, what the staff is doing, and whether we are accomplishing the goals which have been set forth.

Now, moving on to the budget request before us today, a $7.3 billion request for fiscal year 2001, that represents a decrease below the current level, but I note with grave concern that the decrease is largely attributable to the administration's decision once again to slash the Clean Water State Revolving Fund. While cutting this critical program by 40 percent, EPA again proposes several new unauthorized boutique programs. I feel like I am experiencing deja vu.

This budget proposal does not seem to be a carefully crafted budget based on an analytical assessment of EPA programs yielding the most environmental and human health protections. Rather than initiating new unauthorized programs, I would hope EPA would be getting its house in order, focusing on key management challenges.

It is puzzling to me that EPA would propose new programs when it has not resolved longstanding material weaknesses, such as the backlog in the NPDES program. As I understand it, there has been virtually no progress in reducing the backlog in the last year and apparently it has grown. Rather than fixing the problem, EPA proposes tens of millions of dollars in new programs.

New programs include a proposed $85 million Clean Air Partnership Fund, resurrected from last year's budget proposal, with no specific authorization, no specific criteria, no specific goals. EPA also proposes a $50 million Great Lakes Grant Program without specific authorization or criteria. What precipitated the need at this time for a $50 million program is unclear. If we are going to have a new Great Lakes Grant Program, why not a Chesapeake Bay, Lake Champlain, or Lake of the Ozarks Grant Program?

While EPA proposes to start these new activities, as I said, the Clean Water State Revolving Fund is slated to be cut by $550 million or 40 percent. As we discussed last year, EPA itself has found at least a $200 billion nationwide need for wastewater infrastructure financing, including replacement costs, and those replacement costs could be over $100 billion.

In addition, EPA's proposed new rules for TMDL's would make further clean water infrastructure financing even more critical if States were forced to comply with the new standards. While I was unable to be at the EPW hearing in the Senate last month, I understand you cited clean water as one of the top three environmental programs, so I am very distressed that this authorized program with a proven track record and a demonstrated need would be slated for a cut. I think one of our highest priorities to the extent our allocation will allow should be restoring the cut to the Clean Water State Revolving Fund.

The administration has also dusted off the Better America Bonds Initiative. It would give EPA the authority to select proposals for $2.15 billion in bonding authority aimed at creating open spaces and restoring open areas. A new twist this year, the proposal would earmark $250 million for anthracite coal-related projects. Why anthracite coal projects have been singled out for special consideration is not explained in the budget documents.

Once again, the program is another example of EPA seeking to pursue new activities and boutique programs, without specific Congressional direction or authority, while we have other ongoing activities and management challenges not being addressed.

Again, the budget proposes a doubling of the Climate Change Technology Initiative. I do not believe this is a critical element in the mandate to address core environmental problems. The decision to increase this program really makes me wonder about the budget process which is supposed to be based on a scientific assessment of priorities and activities which yield the most protection to human health and the environment.

Finally, turning to what is probably the hottest environmental issue of the year, EPA's proposed Total Maximum Daily Load, or TMDL rule. The latest acronym in the Federal alphabet soup to receive notoriety, TMDL refers to EPA's proposal to require the States to set pollution budgets for impaired waters and establish implementation plans to bring these waters into compliance with water quality standards.

The proposal has generated tremendous controversy, as it seems EPA would require the regulation of certain non-point sources even while EPA has no authority to do so under the Clean Water Act. In addition, serious questions have been raised as to how States would come up with the resources needed and whether the States would even have the ability to implement the rule. There are also serious gaps in data, research, and monitoring to meet the requirements EPA has set forth.

As I traveled around my State, I have heard concerns that the rule represents a new unfunded Federal mandate, an expanded Federal role which would undermine EPA's relationship with the States, and basically a command-and-control approach.

The National Governors Association has said: "The regulations fail to properly respect President Clinton's executive order on federalism, which notes that prescriptive, inflexible approaches to public policy problems can inhibit the creation of effective solutions."

Madam Administrator, at a minimum EPA has many concerns it must address before it can finalize the rule on TMDL's.

In closing, EPA has many challenges before it. We know the important role that the EPA must have in assuring that we continue to clean up our environment. I assure you that we on this committee are committed to doing everything we can to improve the environment and to see that the Agency meets the challenges to ensure a proper stewardship of the taxpayer's dollar and the environment.

With that, I now turn to my distinguished ranking member, Senator Mikulski.

[The information follows:]

[General Accounting Office, March 23, 2000]

HUMAN CAPITAL: OBSERVATIONS ON EPA'S EFFORTS TO IMPLEMENT A WORKFORCE PLANNING STRATEGY

(By Peter F. Guerrero)

Mr. Chairman and Members of the Subcommittee: We appreciate the opportunity to present our observations on the Environmental Protection Agency's (EPA) efforts to determine the workforce it needs to meet its strategic goals and objectives. During the past decade, when most federal agencies reduced their staffing, EPA's workforce grew by about 18 percent, even though the states were assuming more responsibility for carrying out federal environmental programs and enforcement activities. EPA officials attribute much of the growth during this period to additional statutory responsibilities given the agency, such as the Clean Air Act Amendments of 1990. Concerned about such growth, the Congress, in its deliberations on EPA's fiscal year 2000 budget request, expressed its expectation that the agency, while remaining flexible to meet its program requirements, would not exceed a personnel level of 18,000 full-time equivalents (FTE)[1] by the end of fiscal year 2001, a reduction of about 100 FTEs from EPA's estimated level for fiscal year 2000.

This Subcommittee has also expressed concern that increases in EPA's personnel levels may reflect incremental responses to meet the demands of new environmental initiatives, rather than the results of a workforce planning strategy linked to the agency's strategic planning efforts. Such a strategy would identify EPA's current and future human capital needs, including the size of the workforce, its deployment across the organization, and the competencies (knowledge, skills, and abilities) needed to meet the agency's strategic goals and objectives. In response to the Subcommittee's interest in EPA's workforce planning, we reviewed (1) how EPA determines the number of employees and the competencies needed to carry out its strategic goals and objectives and (2) what actions, if any, EPA is taking to improve its workforce planning activities.

In summary, our findings are as follows:

—EPA does not now have a workforce planning strategy to determine the number of employees and competencies needed to carry out its strategic goals and objectives. In preparing the agency's annual budget request, EPA assistant administrators, regional administrators, and other senior officials determine the increases or decreases in the FTEs requested by the agency. The senior officials make their decisions on the basis of information provided by program managers, who identify incremental changes in their needs from the prior year. However, EPA does not have the detailed workforce planning information it needs to inform such decisions, including (1) information on the linkage between the FTEs requested and the agency's ability to meet its strategic goals and objectives and (2) any excesses or gaps in needed competencies within the agency's

[1] An FTE represents 2,080 work hours, the equivalent of one person working full time for 1 year.

various headquarters and field components. Furthermore, EPA has not assessed the accuracy of its existing data to ensure that its employees are being used in ways that are consistent with the intent of its congressional appropriators.

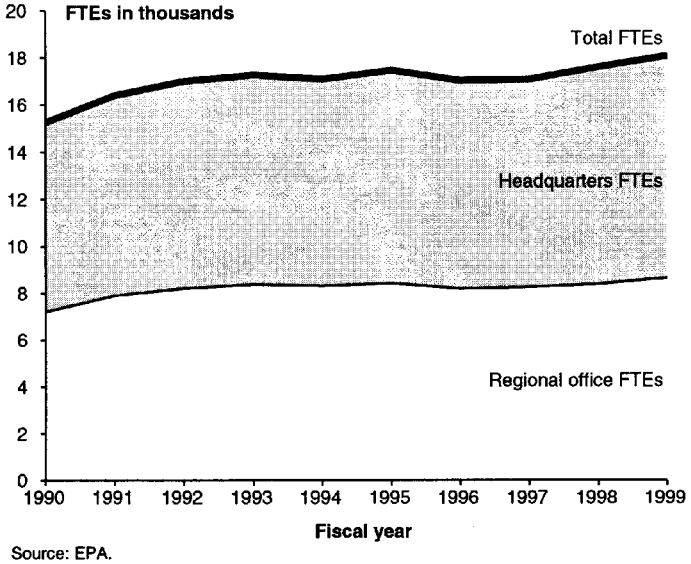
—Although EPA does not currently have a workforce planning strategy, it has taken steps to identify its current and future human capital needs, including the size and competencies of its workforce. In May 1999, EPA completed a study that identified (1) the competencies needed to meet the agency's current missions, (2) possible alternative missions that EPA may face in the future, and (3) new competencies that may be needed under each of the future mission scenarios. While a step in the right direction, the study was not detailed enough to identify in total or in individual organizational components the number of employees who need to possess the competencies identified. Furthermore, citing budget constraints, EPA discontinued its efforts to implement a workforce planning strategy, which was to include a continuous process to monitor and assess the agency's workforce in light of internal and external changes in its environment. Although EPA currently has no resources designated for implementing a workforce planning strategy, the agency recently prepared a draft human resources strategic plan. According to EPA officials, a workforce planning strategy would be developed and implemented as part of this plan. EPA officials plan to meet in April 2000 to consider whether to approve the draft plan.

We met with EPA officials, including the Associate Director of EPA's Annual Planning and Budgeting Division, Office of the Comptroller, to discuss this statement for the record. They told us that the information reported is a fair assessment of EPA's workforce planning activities. They provided several technical comments and clarifications, which we incorporated as appropriate.

BACKGROUND

EPA is organized into 13 major headquarters offices, located in Washington, D.C., that receive administrative, investigative, and laboratory support from various headquarters' field entities located throughout the country. EPA also maintains 10 regional offices to implement federal environmental statutes and to provide oversight of related state activities. While total federal employment was reduced by about 17 percent from fiscal year 1990 through fiscal year 1999, the FTEs available to EPA to carry out its programs grew from 15,277 to 18,078, an increase of about 18 percent. (See fig. 1.) Most of the growth occurred from fiscal year 1990 through fiscal year 1993, when the FTEs increased from 15,277 to 17,280, an increase of about 13 percent. Since then, EPA has grown at a more moderate rate, averaging less than 1 percent a year.

Figure 1: EPA's Total FTEs, Showing Headquarters and Regional FTEs, Fiscal Years 1990-99



Source: EPA.

EPA's employees possess a wide range of educational backgrounds and skills. Figure 2 shows the occupations that represent the largest part of the agency's workforce. EPA also makes extensive use of contractors to perform its work. The agency estimates that it would need an additional 11,000 to 15,000 employees if it did not receive appropriations to fund contractors. Thus, EPA's workforce must be adept both at delivering services directly and at effectively managing the cost and quality of mission- support services delivered by third parties on the government's behalf.

Figure 2.—EPA Employees by Major Occupational Category, as of September 30, 1999

	Percent
Engineers	13
Scientists	24
Attorneys	6
Environmental protection specialists	15
Clerical	7
All others	35

Source: EPA.

The Government Performance and Results Act of 1993 (the Results Act) requires EPA and other federal agencies to set goals, measure performance, and report on their accomplishments as a means of achieving results. Effective implementation of performance-based management, as envisioned in the Results Act, hinges on senior managers' willingness and ability to strategically manage all of the agency's resources—including human capital—to achieve missions and goals. Specifically, this requires aligning strategic and program planning systems with an explicit workforce planning strategy that includes (1) identifying the current and future competencies needed and any gaps, (2) developing a workforce action plan designed to address the gaps, and (3) monitoring and evaluating the workforce planning actions taken. Workforce planning is a key component of a human capital self-assessment checklist we published as a discussion draft last September.[2] (See attachment I.)

EPA DOES NOT NOW HAVE A WORKFORCE PLANNING STRATEGY TO ASSESS ITS HUMAN CAPITAL REQUIREMENTS

Although EPA's senior managers are closely involved in decisions concerning the agency's annual budget requests for staffing, the agency has not developed and implemented a workforce planning strategy to systematically and comprehensively assess its human capital requirements. Consequently, EPA cannot determine whether it has the appropriate number of people and competencies needed to effectively carry out its strategic goals and objectives. Furthermore, although EPA collects cost-accounting data on the amount of time its employees spend in carrying out the agency's strategic goals and objectives, it has not assessed the accuracy of the data. Thus, EPA lacks assurance that its employees are being used in ways that are consistent with the intent of its congressional appropriations legislation, which identifies the number of FTEs approved for each strategic goal and objective.

During most of the 1980s, EPA used a workload model for calculating the total number of FTEs needed and for allocating them among its various headquarters and regional offices. The model was based on studies of the amount of time required to perform key functions of the agency. The agency used the model to allocate its staff among its various organizational units but did not use it for determining the number of employees. An EPA official explained that the number of employees needed, according to the model, consistently exceeded the personnel ceilings established for the agency by the Office of Management and Budget. In 1987, EPA froze the workload model because it believed it was spending an inordinate amount of time each year negotiating the distribution of marginal staffing increases. Although the model continued to be used for allocating staff resource levels into the early 1990s, it was not updated to reflect new circumstances, became outdated, and was discontinued.

EPA's current process for preparing its budget request involves identifying funding and staffing increases, ("investments") in areas it considers to be priorities, which are usually offset by decreases, ("disinvestments") in areas of lower priority. For example, for fiscal year 2000, EPA identified investments totaling 311 FTEs and the same number of disinvestments. Increases were identified for program priorities such as clean air, climate change, information management, and children's health. To accommodate the increases, decreases were identified in other agency activities,

[2] *Human Capital: A Self-Assessment Checklist for Agency Leaders* (GAO/GGD–99–179, Sept. 1999.)

such as those for assessing chemical risks, enforcing clean water regulations, and cleaning up contaminated waste sites. Through such reallocations, EPA focuses on the number of staff available and does not consider the types of skills needed for program activities. We did not review the basis for EPA's decisions on the reallocations.

After the Congress reviews EPA's budget request and appropriates resources to the agency, senior officials allocate the available FTEs to EPA's organizational units. Because EPA does not have a system in place to assess its human capital requirements and to allocate resources accordingly, the allocations are based primarily on the number of FTEs that were allocated in previous years, with increases or decreases made incrementally to reflect the agency's "investments" and "disinvestments." However, an approach based on historical data may not accurately reflect the conditions facing EPA today and those likely to face it tomorrow. For example, over the past decade, technological changes have had a major impact on the skills and technical expertise needed to carry out federal programs. In addition, changes have occurred in EPA's regional environmental responsibilities as states have accepted more responsibility for the day-to-day implementation of federal environmental statutes. For example, in 1993, only eight states had accepted responsibility under EPA's delegation process for implementing provisions of the Safe Drinking Water Act. By 1998, 36 states had done so. The Environmental Council of the States, an association representing state environmental administrators, has pointed out that the states now assume responsibility for more than 75 percent of federal environmental programs. Such changes may reduce EPA's activities in some areas, such as carrying out inspections, but may in turn create the need for additional people and competencies in other areas, such as providing technical assistance and reviewing and measuring the effectiveness of state programs.

Fact-based human capital management requires data on how EPA's current workforce spends its time. However, the agency's efforts to account for the time spent to carry out its various tasks have been hampered by inaccuracies in existing data. For example, although each of EPA's regional employees is assigned to a specific work area, such as pollution prevention or groundwater protection, the employees may be directed to perform tasks in other areas. In a September 1996 report, EPA's Inspector General stated that in two regions reviewed, employees spent a significant amount of time working in areas unrelated to the program areas to which their time was charged. In October 1998, EPA modified its cost-accounting system to account for tasks related to its strategic goals and objectives. EPA officials told us that the accuracy of the data collected under the new system has not been assessed, although they said the agency recognizes the need to do so. Assessing the data is crucial for their use under the agency's plans to develop and implement a workforce planning strategy. For example, an official representing EPA's Office of Enforcement and Compliance Assurance, which relies extensively on regional employees to carry out its functions, told us that it is important that the office have an accurate system of accounting for time spent in order to determine appropriate personnel levels.

EPA HAS BEGUN TO DEVELOP AND IMPLEMENT A WORKFORCE PLANNING STRATEGY

EPA's decentralized organizational structure and the size and deployment of its workforce have long been issues of concern among outside reviewers of the agency. For example, in an April 1995 report to the Congress, the National Academy of Public Administration (NAPA)[3] commented that EPA has little data to determine the day-to-day activities of its regional employees. NAPA recommended that EPA complete an analysis of the activities of the regional offices, determine their appropriate size, and add or reduce staff accordingly.

During the past decade, EPA has attempted to improve its workforce planning but has fallen short of implementing an effective strategy for doing so. As previously mentioned, EPA stopped using its workforce analysis model in the early 1990s, partly because the model required more resources than EPA considered appropriate to spend. For fiscal years 1995 through 1997, the agency conducted annual surveys to analyze the human capital needed to achieve its mission. Once each year, employees estimated the time they spent on various tasks for the first several months of the year and projected how they would spend their time during the remainder of the year. The purpose of the survey was to gain an understanding of where the workforce was deployed, ensure that the budget reflected this deployment, and make certain that resources were directed toward high-priority objectives and performance goals.

[3] NAPA is a nonprofit, nonpartisan, collegial organization chartered by the Congress to improve governance at all levels—federal, state, and local.

EPA officials told us that the survey was discontinued after fiscal year 1997 because of data collection flaws that caused EPA to lose confidence in the validity of the survey data. They said that the survey did not clearly define terms and reporting requirements, causing inconsistencies in the data reported by various employees and organizational components. In analyzing the results of the 1997 survey, EPA found that the workforce data differed substantially from the data reported to the Congress in EPA's fiscal year 1997 operating plan. For example, the survey data showed that the amount of time spent on activities of the Office of Enforcement and Compliance Assurance was 23 percent less than the amount reported by EPA in its operating plan, whereas the time spent on activities of the Office of Policy, Planning, and Evaluation was nearly three times the amount reported in the plan.

EPA has recently attempted to address the need for a more credible strategy to determine its workforce requirements. In June 1998, EPA initiated a project to assess and act upon the implications of strategic change for the agency's workforce. Through this project, which was completed in May 1999, EPA (1) developed a workforce profile identifying the competencies of the people employed by the agency and (2) estimated what competencies it would need in the future under various scenarios. By comparing the current workforce with estimated future needs, EPA identified potential gaps.

While the workforce assessment was a step in the right direction, it was a limited measure toward needed actions to implement a workforce planning strategy capable of meeting the agency's diverse goals and objectives. For example, the assessment focused on the competencies, such as communication and computer skills, needed to carry out EPA's missions. However, the study was not designed to determine how many employees needed such competencies or how employees should be deployed among strategic goals and objectives, across program areas, and in various areas of the country. Furthermore, although EPA has identified the competencies that it believes are vital and difficult to obtain and maintain, it has not used this information to develop an integrated workforce strategy for recruiting, developing, and maintaining needed competencies in its current and future workforce.

EPA had intended to build on its workforce assessment by developing and implementing a workforce planning strategy to (1) continually monitor and assess its workforce in light of internal and external environments and (2) monitor and evaluate workforce actions taken. Although EPA had contracted for the development of the strategy, EPA officials terminated this work in February 1999, citing budget constraints. Nevertheless, the director of EPA's Office of Planning, Analysis, and Accountability told us that, while the agency currently has no resources allocated for implementing a workforce planning strategy, it recognizes the need to complete the job. He said that EPA is considering linking a workforce planning initiative to its strategic planning efforts. However, little time remains for implementing a workforce planning strategy before EPA's current strategic plan is scheduled to be revised and issued by September 2000.

EPA officials told us that in terminating the contractor's work for the development of a workforce planning strategy, EPA decided to develop such a strategy itself. Such an initiative is being considered under the auspices of EPA's Human Resources Council, which consists of senior managers in EPA's headquarters and regional offices. At the direction of the Council, a multifunctional group of program office executives and representatives of EPA's Office of Human Resources and Organizational Services has prepared a draft strategic plan for human resources. The plan calls for securing essential competencies through a workforce planning strategy aimed at recruiting and developing staff and providing incentives to retain highly competent employees. EPA officials told us that this strategy in essence would continue the efforts that EPA had planned to do under the contract. The Human Resources Council is scheduled to meet in April 2000 to discuss the plan.

OBSERVATIONS

The growth in EPA's personnel levels during the past decade has been accompanied by substantial changes in the roles and responsibilities of the agency and its state partners. In addition, technological advances during this period have provided opportunities for efficiencies to carry out the agency's strategic goals and objectives. While EPA has implemented several initiatives during the past decade to gain a fuller understanding of the demands facing its workforce, these initiatives have not received the resources and senior management commitment needed to bring them to fruition, and they have fallen short of their objectives. Without a workforce planning strategy, EPA is not able to identify the size of its workforce and the competencies that need to be deployed among its organizational components to effectively and efficiently carry out its strategic goals and objectives.

EPA's current efforts to develop and implement a human resources strategic plan, including a workforce planning strategy that is focused on continually monitoring and assessing its workforce and evaluating the effectiveness of actions taken, is a step in the right direction. If the plan is adopted, its ultimate usefulness will depend largely on the extent to which EPA's senior management remains committed to and provides the resources needed to ensure its success. Furthermore, as part of its workforce planning strategy, EPA will need to ensure that it collects and analyzes accurate data on the amount of time being spent on various programs and activities. Without such data, EPA cannot accurately determine the costs of carrying out its strategic goals and objectives and ensure that its workforce is being used in ways that are consistent with the intent of its congressional appropriators. In addressing these concerns, it is important that EPA identify the resources that would be necessary to implement a workforce planning strategy and to assess the accuracy of its cost-accounting data on the amount of time employees spend in performing tasks related to the agency's strategic goals and objectives.

We performed our review from October 1999 through March 2000 in accordance with generally accepted government auditing standards. If you have any questions about this statement, please contact me on (202) 512–6111. Major contributors to this statement were Ed Kratzer, Bill Roach, Ken McDowell, and Rosemary Torres-Lerma.

ATTACHMENT I

THE HUMAN CAPITAL FRAMEWORK

We recognize that there is no single recipe for successful human capital management. But we have identified a number of human capital elements and underlying values that are common to high-performance organizations in the public and private sectors. The five parts of the human capital framework are as follows:

1. Strategic Planning: Establish the agency's mission, vision for the future, core values, goals, and strategies.
2. Organizational Alignment: Integrate human capital strategies with the agency's core business practices.
3. Leadership: Foster a committed leadership team and provide continuity through succession planning.
4. Talent: Recruit, hire, develop, and retain employees with the skills for mission accomplishment.
5. Performance Culture: Enable and motivate performance while ensuring accountability and fairness for all employees.

STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. Thank you very much, Mr. Chairman. Mr. Chairman, I know that it is about 5 of 10:00. I note that the chairman of the full committee is here, so I am going to ask unanimous consent that my full statement be included in the record and just make a few highlights because also other colleagues want to make a few statements and questions.

First of all, I really want to welcome Carol Browner and her team to this hearing. I know that for Ms. Browner this is her eighth appearance before this subcommittee, and I would like to thank you for your service to the Nation and all of the much help that you have given to my own State of Maryland, because in Maryland the environment really is tied to economic development. We feel good environment is good business in Maryland.

You have had to deal with the alligators in the Everglades and you have had to deal with the alligators in Congress and you have had to even deal with alligators at OMB. So I know alligators are an endangered species, but we really want to compliment you for that.

I think the chairman has laid out a road map that he would like to pursue, but I think when we have someone who has served the

Nation for 8 years—we have had continuity in leadership, therefore continuity in policy, and this is why we could get into those details.

I would like to thank you and President Clinton for what EPA has meant to the State of Maryland. The ongoing funding for the Chesapeake Bay, its cleanup, and all the aspects of it related to clean water and safe water are very much appreciated. It was begun by Senator Mac Mathias and now through President Carter, President Reagan, President Bush, and President Clinton. We want to say thank you.

We want to thank you for your help in issues related to smart growth, because we in Maryland believe in development, but we have very serious concerns about encroachment and what that means to the environment.

We also want to particularly acknowledge your role in working in a partnership with our governor and our mayor on the devastating effects of lead poisoning, which is really a killer. We have children within the very shadow of Johns Hopkins University that are so loaded with lead, one little boy on his way to school just lay down on the street and said: I am too sick to go any further. So we thank you for your relationship with our governor, with our mayor, and his health teams, because we believe in a couple of things: one, that there is a direct linkage between the environment and public health, and that our environmental policies should always be strengthening the public health of our community.

Second, environment tied to economic development. Certainly the Chesapeake Bay, other bay initiatives, and so on, where really our natural assets need to be preserved, which is why people want to live and work near there.

In addition to a good environment for economic development, it is really the brownfields issues, and I am going to talk about it. In my own home town there are 3,000 acres of brownfields surrounding the water, and when we clean them up it offers homes, commercial real estate, and we are now turning our Inner Harbor—everybody knows the glitz and the stadiums, but we are taking old factories and turning them into digital economic development parks. We are really digitalizing our harbor, where it is no longer appropriate to use for shipping.

These are some of the areas that I want to go over with you and talk with you in more detail, as well as the pfisteria research that caused problems. But again, many thanks. I personally am grateful to have you as a constituent in downtown Takoma Park, and I have been—really, I want to compliment you for your professional relationship certainly with me and I believe the Congress and your service to the Nation.

With that, I will submit my statement and wait for my time for my questions.

Senator BOND. Without objection, the statement will be accepted, and thank you very much, Senator Mikulski.

Now I turn to Chairman Stevens.

STATEMENT OF SENATOR TED STEVENS

Senator STEVENS. Well, thank you very much.

I do not have a prepared statement. I do greet the Administrator with thanks before I ask a couple of questions. I am not going to

ask them; I will submit them. I do thank you for the fact that the President's budget this year has a $15 million request for Alaska sanitation problems in rural Alaska. I have been working on this now for a series of years and we have had earmarks in the past, and at this time we have got a request. I cannot guarantee you we will not try to increase it, but I do appreciate the request.

I do have some questions I would like to submit. Let me just outline two of them. One concerns the Red Dog Mine that is north of Kotzebui above the Arctic Circle, a very unique arrangement, owned by the Alaska Native people and operated by a very fine Canadian company. They have a unique arrangement for employment. At least two, perhaps three, people share one job. With a two-shift mine, it means that they have got two and a half times the employees of any other mine operating in similar circumstances.

They have asked for and received State approval to expand that mine through the use of an additional generator. Your section 10 reversed the State finding that this was the best available control technology, and I am just sort of appalled at that because in this region of the world I do not think your people have the capabilities that we have. Our State is probably the number one State in terms of protecting air quality.

It really has been a shock to the State. I know that you have talked to the governor. But I hope you will answer the questions I have got to submit. I cannot ask questions right now.

But the second one concerns the Fairbanks carbon monoxide problem. Fairbanks, again located the farthest north major city in our State, it has a national ambient air quality standard problem for carbon monoxide. It has tried its best to achieve that, but we note that the automobile manufacturers have not produced the cars that they were supposed to produce to reduce both the carbon monoxide emissions and other forms of pollution, and yet the cities now are being put in the position of sanctions because they cannot meet the goals that should have been attainable had the automobiles been modified as contemplated by the basic law.

I think that the clock is ticking. As I understand it, it runs out in April and our second largest city is going to face sanctions which will lead, strangely, to reduction in the use of automobiles in an area that you cannot walk and you cannot take buses and there are no other forms of transportation. We do not quite understand that.

I would urge you to take a look at that. In both instances, your Agency has reversed our State in areas where they had delegated authority under the law to make these decisions, and people made plans based on long, long conferences and working these things out with the State and now they cannot continue.

So again, I thank you for what you have done in the past, but I would urge you to take a look at this. I think in those two instances—I will tell you what. Why do you not send your people up and have them live in Fairbanks or in Kotzebui for a year, okay? In Fairbanks its 68 below, 70 below in Kotzebui. They work all year long. Your people come in the summer time and try to understand this. It is just not fair.

Thank you.

Ms. BROWNER. Mr. Chairman, I understand that Chairman Stevens will have to leave. If I might respond quickly before he leaves.

Senator STEVENS. I do have to leave. I am going to submit the questions.

Senator BOND. I think if you have got just a minute I would be happy to, if nobody objects, to allow her to respond.

Ms. BROWNER. I want to say something about the mining issue. I did have a very good meeting with your governor. Since that time we have been able to reach an agreement so that the construction schedule for the company can be taken into account. We are trying very hard to get this resolved as quickly as possible. I thought the meeting was very helpful.

Senator STEVENS. Good. That is good news.

Ms. BROWNER. I think we will be able to find the resolution.

Senator STEVENS. It has the highest level of unemployment of any area in the country.

Ms. BROWNER. Yes, I understand.

Senator STEVENS. Thank you very much.

Senator BOND. Thank you very much, Chairman Stevens.

Now I turn to Senator Leahy.

STATEMENT OF SENATOR PATRICK J. LEAHY

Senator LEAHY. Thank you, Mr. Chairman.

I am delighted to have Administrator Browner here. I am a big fan of hers and I think she has done a superb job in running the EPA. I also am pleased that she has had a number of occasions to come to Vermont.

I was going to try to talk to Senator Stevens about who gets colder weather, but the 70 degrees did kind of top our 45 degrees below zero this year and I realized I had lost all bragging rights and will stay away from that.

You have shown a great deal of leadership on environmental and public health issues, from lawsuits against dirty power plants to recommendations to Congress regarding toxic fuel additives. And you have done it even though you know that in some of those you would face from different special interests a lot of criticism.

But I think that, because you have been persistent in this, you have improved our environment and the public health. That helps not just us today, but it helps people like your own children, who will live most of their lives in this century, my grandchild who will, and others.

In my case—once in a great while we get parochial on this committee. I know that the Senator from Maryland is shocked to hear that, but it is true. And I have considered the environment, the unique environment of my own State of Vermont, preserving it to be one of my highest priorities. The funding that EPA has consistently requested for the Lake Champlain Basin program has allowed Vermonters to form some very long-term good commitments and programs and partnerships with our communities, our State agencies, nonprofit organizations, and it has helped all of us, because they have focused on pollution reduction and toxic hot spot cleanup, and have also benefited the hundreds of thousands, even millions, of people who during that time have visited that area from other parts of the country.

A lot remains to be done, but I think we can continue to protect precious water resources in Lake Champlain and throughout the State, from our lakes and our ponds, major watersheds like the Connecticut River.

I am pleased to see you sponsoring grants for smart growth pilot projects in urban and rural communities. In Vermont we have two of these pilot projects, one in a small city, one in a rural watershed. They are rapidly gaining attention. They integrate economic and natural resource data into web-based interactive tools for city planners. I think that I could see this, especially with the Internet spreading throughout our State, I think that you are going to see these kind of things promoting smart growth initiatives all over the country.

We have a unique project in Vermont on acid rain that monitors the on the ground ecological and human health effects of continuing acid deposition in the Northeast. We know there is a lot of transport of atmospheric pollutants from the Midwest to the Northeast, but we have to know what the long-term damage of that is, and I hope we can continue these kind of studies.

A final note. I want to go on record with my strong support of your recent announcement with Secretary Glickman that you want to significantly reduce or eliminate the use of the fuel additive MTBE and to increase use of safe, renewable alternatives. I strongly support that. I think it is something that will benefit all of us and it reinforces some legislative strategies promoted earlier this year by Vermont and seven other States in the Northeast. So I commend you.

I have to go to Judiciary and I will leave, with your permission, Mr. Chairman, a number of questions for the record. But I did want to highlight those areas.

Senator BOND. Thank you very much, Senator Leahy, for joining us. We will, of course, as usual have questions submitted for the record that we will forward to the Administrator. I think Senator Stevens had some, and we will ask that the Administrator and the Agency respond as quickly as possible. Thank you very much for being here.

Now we turn to Senator Lautenberg.

STATEMENT OF SENATOR FRANK R. LAUTENBERG

Senator LAUTENBERG. Thanks, Mr. Chairman. I start by congratulating you and Senator Mikulski for your work on the VA–HUD bill.

I also want to extend my congratulations to Carol Browner for her leadership on issues affecting public health and the environment. I congratulate you also, Madam Administrator, for creating an excellent team around you, for providing the kind of inspired devotion to duty that we see with the folks that all of us have occasion to work with at EPA.

I see a record of successes that I do not think are really matched, if we look over history, of an Agency that was taken over at a period of relatively troubled times, had been through defaults by leadership, programs not working, and what I see is that you have taken the broad authority given you to protect the public health,

to use it effectively to develop programs that clean the air and to respond to emergencies.

When I look at the list of things that have happened under your administration, the information that is provided through to the public through the web site is so valuable that we have heard complaints from both public and industry when you had to shut it down. You have used the opportunity to exercise leadership on so many fronts and that is respected. That is what I would have wanted of an executive when I ran a company and that is what I want of the head of a department in my role here with my public responsibility.

I look at the success of Superfund. Ninety-one percent of the sites listed on the NPL are undergoing cleanup, construction, or are deleted. I note that over the life of Superfund EPA has reached settlements with private parties of an estimated $16 billion. So challenges to whether the polluters should pay or should not pay is really moot. The question is—the outcome is they pay. They have committed a sin that they have had to pay for, they have committed a public affront, and they pay for it.

We see brownfield successes: generated 1,580 cleanup programs, 4,300 redevelopment jobs, and leveraged $1.6 billion in public and private investment. Clean water, increasing the public's right to know about health risks at beaches by completing a database of beach monitoring programs, a program close to my heart and my interests; and increased the number of communities to 11,000 that have programs in place to protect drinking water sources.

So Madam Administrator, I am proud of the work that you have done. I am proud of the work that this committee has done to support it, and I am delighted to see you in this, our mutual kind of swan song here.

In recent years the bill sent by the President has allocated scarce resources in a sensible manner, it has been relatively clean of controversial language, and it has moved through the process in a timely manner, and I appreciate this and hope that we will be able to work together to ensure that if any such language, restrictive language, is included that we are wary of that, but the language that permits us to balance the use of our resources will enjoy, I hope, bipartisan support, and I am confident the chairman will agree with that.

We welcome the opportunity to learn more about EPA's budget request. I remain particularly interested in providing adequate funding, though, for core EPA programs. There is a temptation to get attracted to new initiatives, but we dare not lose sight of the programs that are the backbone of the Agency. We have to continue to fund and support those.

Whether the issue is cleaning up Superfund sites, addressing the ongoing hazardous waste sites so that they do not become future Superfund sites, reviewing the safety of pesticides, setting standards for toxins in the air, EPA's core programs have proven over the years to be of tremendous benefit to the health and well being of our constituents, and we dare not ever lose sight of them.

In addition, I have been encouraged by the accomplishments of the EPA brownfields program, as I earlier mentioned. I want to as-

sure you that we will do everything we can, we want to, to foster those efforts.

Mr. Chairman, once again I do thank you for holding this hearing and look forward to the presentation from the longest serving Administrator in EPA history, one who did not go down with the ship, but took over the helm and did it masterfully.

Senator BOND. Thank you very much, Senator Lautenberg.

We have raised a lot of questions, so, Madam Administrator, we would be happy to give you 10 minutes for your opening statement and comments you want to make, and then obviously we will have, we hope to have a number of very productive rounds of questioning. Welcome.

STATEMENT OF CAROL BROWNER

Ms. BROWNER. Thank you, Mr. Chairman and Senator Mikulski, Senator Lautenberg, for the opportunity to appear again before this committee in my eighth year as Administrator of the country's Environmental Protection Agency. I am pleased to be here today to present the Clinton-Gore Administration's budget request for the EPA.

Accompanying me today are the Agency's senior managers, including Mike McCabe, our Acting Deputy Administrator, and Mike Ryan, our Acting Chief Financial Officer.

I would like to begin by saying, Mr. Chairman, Senator Mikulski, Senator Lautenberg, we look forward to working with all of you and the other members of this subcommittee to craft a budget that will allow us to meet the very important public health and environmental needs of the people of this country. I believe we have fostered a productive working relationship which has enabled us to meet the mutual goal of protecting public health and the environment. Together, once again, we have a great opportunity to work in partnership to provide the American people with strong public health and environmental protections that they want and that they have every right to demand of us and that they deserve.

The budget that we put forward achieves that goal. The President has presented a budget that maintains fiscal discipline while making essential investments in environmental priorities. This administration has repeatedly demonstrated that we can enjoy enormous economic prosperity, including the longest economic expansion in history, while aggressively cleaning up the air we breathe, the water we drink, the land we live on, the communities where we raise our families.

Over the past 7 years of unprecedented economic progress, this administration, working with this committee, has distinguished itself through unprecedented environmental protections. We have done it through common sense, cost-effective measures that emphasize partnerships and cooperation with businesses, State and local governments.

The 1996 amendments to the Safe Drinking Water Act are an example of what we can do together, bipartisan work on behalf of the American people to provide clean, safe water to drink. Working with this subcommittee, we have supplied the first ever funding, a $3.2 billion loan program, for communities to upgrade their drinking water systems.

We set up the first public right to know program for ensuring that all consumers of tap water know the source and the quality of that water. We have announced new measures to protect the health of 140 million Americans by strengthening protections from emerging threats like cryptosporidia.

As a result of these efforts, efforts we have undertaken together, 89 percent of Americans now get tap water from drinking water systems that meet public health standards. That is an increase of 6 percent since the standards went into effect in 1994.

We have tripled the pace of cleaning up toxic wastes under the Superfund program. More toxic waste sites have been cleaned up and cleaned up more affordably in this administration than in all previous years combined. At the end of 1999, a total of 670 Superfund sites had been cleaned up. Of those sites, 515 were completed under this administration.

We have taken important steps to reduce emissions from autos and small trucks by up to 95 percent. For the first time ever we have ensured that the very popular sport utility vehicles, minivans, light duty trucks will meet the same stringent air quality standards as other passenger vehicles.

We have required reductions in sulfur levels in gasoline. We have cut toxic air pollution from municipal combusters and other important source categories by 90 percent or more, and we have unveiled new efforts to improve our air quality in 156 national parks and wilderness areas. As a result of these efforts, some 43 million Americans are breathing cleaner air.

At the same time, we have dramatically increased the public's right to know about toxic chemicals released into their local communities and into their neighborhoods. The Clinton-Gore Administration has nearly doubled the number of chemicals that must be reported to communities and required over 6,000 new facilities to report releases of their emissions. As a result, in the past decade toxic pollution has fallen by nearly 50 percent, partly as a result of simply arming local citizens with information about local pollution, about local conditions.

We have revitalized communities by accelerating the cleanup of brownfields, abandoned or contaminated property. Senator Mikulski, I visited one of those sites in Baltimore. DAP Company has moved into a wonderful old warehouse. It has been cleaned up and restored. Every time I am able to visit a brownfield site it just gives me——

Senator MIKULSKI. 400 jobs.

Ms. BROWNER. 400 jobs. A huge sense of accomplishment for the community and of a program that really is working on the ground to meet the needs of local communities.

Across the country, communities are gaining new hope with nearly $70 million in seed grants awarded to over 300 brownfield projects. Senator Lautenberg, as you pointed out, this has leveraged new investments, over a billion dollars. It has created thousands of jobs. It has expanded the tax base for local communities and it has brought decaying areas of the cities back to vibrant life.

Working with Congress in a bipartisan manner, we also passed the new Food Quality Protection Act that for the first time sets pesticide safety standards that are clearly protective of our chil-

dren. We have taken action to reduce significantly special risks posed to children by limiting the use of two pesticides most widely used on foods found in the diets of our children.

While ensuring strong environmental protection, we have also reinvented government in innovative ways to achieve greater environmental results at less cost. We have vigorously pursued common sense, cost-effective solutions to today's environmental problems.

The budget before you requests $7.3 billion for the Environmental Protection Agency. We are also requesting $2.2 billion for the Better America Bonds Program. This builds on and continues 7 years of environmental achievement under this administration.

In terms of our core programs, and Senator Lautenberg, you spoke to this, the budget before you provides for an 11 percent increase in EPA's core programs. We do everything from setting air and water quality standards, drinking water standards, food safety, scientific research, and most importantly, we enforce the environmental and public health requirements. This is the single largest increase in our operating programs under this administration.

The administration's request provides for such programs as President Clinton's Clean Water Action Plan. It provides for a new initiative to protect and improve one of our Nation's greatest shared treasures, our Great Lakes. It provides for the President's program for cleaner waters across America, which for the first time targets individual waterways for cleanup plans tailored specifically to meet their needs.

This part of the budget gives States the flexibility that they need to fight polluted runoff. Again, Mr. Chairman, we are going to ask this committee for specific language to allow States the flexibility to set aside up to 19 percent of their Clean Water Revolving Fund to address the needs of polluted runoff. Not a requirement for the States, but an opportunity should they choose to address their water pollution problems in this way.

The President's budget provides the necessary funding for one of the administration's top environmental priorities, protecting our children. Senator Mikulski, you mentioned the very serious problem of lead. There is no reason why any child in this country should experience lead poisoning. It is a preventable disease, and we are investing in our ongoing efforts to prevent this very horrible disease. We are also seeking money in our children's program for asthma and for dangerous levels of pesticide residues in foods.

The President's budget does provide for a Creative Clean Air Partnership Fund. The partnership fund promotes early reduction in air pollution, and it fosters partnerships and flexibility between State and local governments to encourage new ideas for improving air quality. Some of the best ideas happen at the local level. This program is designed to encourage those local ideas, to give life to those ideas, to make them possible.

The budget calls for continuing to expand the public's right to know, including a new effort to develop a network for key environmental data with our State partners. The States are looking at modernizing their computer programs. It is part of everything from one-step permitting to better environmental management. We are asking for $30 million to support the States in that effort.

We continue our commitment to Superfund cleanup.

Mr. Chairman, I see my time is up. Let me say in closing——

Senator BOND. If you need another minute or two, please.

Ms. BROWNER [continuing]. We are presenting a budget that builds on the work that we have been doing over the last 7 years, under the President and the Vice President's leadership, that prepares us to meet the emerging challenges. Unfortunately, in the work of public health and environmental protection, the job is not really done. As we solve one problem, a new problem emerges. This is a dynamic budget that allows us to speak to the ongoing problems, to resolve them, but also to meet the challenges of the future.

Thank you.

[The information follows:]

PREPARED STATEMENT OF CAROL M. BROWNER

Mr. Chairman and Members of the Committee, I am pleased to be here today to present the Clinton-Gore Administration's fiscal year 2001 budget request for the Environmental Protection Agency. Our $7.3 billion request, and the $2.15 billion Better America Bonds program, continue and strengthen the Administration's commitment to the environment and public health by providing our children, our communities with cleaner water, cleaner air and an improved quality of life.

I would like to express my pleasure to have worked with this distinguished Committee over these past seven few years. I believe we have fostered a productive working relationship, which has enabled us to work together towards our mutual goal of protecting public health and the environment. Although we may not have agreed on every issue and policy, the Agency has benefitted in many ways from the support given by this Subcommittee. For that, we are grateful to you, Mr. Chairman, Senator Mikulski, and the members of the Subcommittee. I again look forward to working with you this year, Mr. Chairman, and Senator Mikulski, as I know the strong bond between our Agency and this Committee will continue.

I am particularly proud of this budget request. Seven point three billion dollars will directly support our operating programs, air and water infrastructure, and the trust funds. Two billion, one hundred and fifty million dollars are for the Better America Bonds program, to help communities invest in green-space preservation, water quality improvements and brownfields cleanup. Most importantly, this budget includes an 11 percent increase, or $384 million, for EPA's core environmental programs.

Once again, the President presents a budget that maintains fiscal discipline while making essential investments in environmental priorities. This Administration repeatedly has demonstrated that we can enjoy enormous prosperity—including the longest economic expansion in history and a plan that will eliminate our national debt for the first time since 1835—while implementing important environmental and public health protections. The American people know that our Nation does not have to choose between a strong economy and a healthy environment.

Over the past seven years of unprecedented economic progress, this Administration, working with this Committee, has distinguished itself through unprecedented environmental progress.

The 1996 amendments to the Safe Drinking Water Act, a fine example of what we can achieve when we work together, coupled with the President's Clean Water Action Plan, have contributed greatly to cleaning up the Nation's waters and to making drinkable, fishable and swimmable water a reality for all Americans.

We have set the tightest emissions standards ever for cars and the first such standards that apply equally to SUV's and minivans.

We have placed special emphasis on protecting our Nation's greatest resource—our children—through actions like working for, winning and implementing the Food Quality Protection Act, that for the first time puts emphasis on protecting the health of infants and children from pesticide risks.

We have provided communities with new access to more information about toxic chemicals released into their communities by greatly expanding the public's right-to-know.

Under this Administration, more than three times as many toxic waste site cleanups have been completed than were completed in the previous 12 years of the Superfund program.

And we have taken the unprecedented step of revitalizing communities by accelerating the cleanup of Brownfields and returning the land to productive use.

The budget we are announcing today preserves this record of success and builds on it.

As it has since the inception of the Clinton-Gore Administration, the EPA budget builds upon those core environmental programs that are the backbone of this agency. This includes: setting environmental standards; environmental enforcement and compliance; and direct implementation programs for the states.

In fiscal year 2001, the Clinton-Gore Administration is requesting an 11 percent increase, or $384 million, over last year for core environmental programs, which allows the Agency to meet the American public's expectations for a safe and healthy environment. The increased is directed at programs for cleaner air and water, safer food and sound science.

For water, the President's fiscal year 2001 budget bolsters the successes we have achieved by providing $495 million in Clean Water state grants, including a $50 million increase to specifically address polluted runoff, the largest current threat to our Nation's water quality.

The Great Lakes, among our Nation's most revered and beautiful water resources, receive $50 million in the President's Budget for a new initiative that will continue the progress we have made in their cleanup and restoration. Through this initiative, states and communities will be eligible for competitively-awarded matching funds to improve water quality through stormwater pollution control, wetlands restoration and remediation of contaminated sediment.

We are stepping up our efforts to identify and restore polluted waterways by providing an additional $45 million in state grants for the Administration's new Cleaner Waters Across America program. The program is aimed at waterways still in need of improvements. Resources will be used to develop specific restoration plans for some 20,000 waterways across the Nation.

Consistent with our goal to provide sufficient capital so that, over the long-term, $2 billion in average annual assistance will be available to localities, the President's Budget provides $800 million for the Clean Water State Revolving Fund—a flexible funding mechanism designed to help communities provide clean, safe and healthy water. This year, we are requesting authority to give states the option of using 19 percent of their Clean Water SRF in the form of grants to fight polluted runoff. I am asking this Committee to join us in providing states with this additional flexibility to provide clean and safe water for the public.

The Administration has taken the most aggressive actions in history to provide cleaner, healthier air for all Americans, and this budget continues that effort.

The President's Budget is providing $85 million for the Clean Air Partnership Fund—a fund that will provide resources to states, cities and tribes to help reduce air pollution. This initiative will foster public-private partnerships to help communities achieve their own clean air goals in ways that make the best sense for them.

In addition, to continue reducing the air pollution that contributes to global warming, $227 million has been proposed for the third year of the Climate Change Technology Initiative. This program promotes voluntary measures that reduce energy use and bring down the energy bills of all Americans, while also reducing greenhouse gas emissions.

Furthermore, to continue to strengthen our relationships with our state and tribal partners, this budget provides $215 million in state and tribal grants to help find solutions to air pollution. Of these resources, $5 million will be granted to states and regional planning bodies specifically to combat the problem of regional haze—one of the most obvious effects of air pollution.

The Administration remains dedicated to improving children's health by providing $68 million for the Children's Environmental Health Initiative. These funds go for critical programs that fight such threats as lead contamination and childhood asthma. We also are continuing our dedication to food safety through the Food Quality Protection Act by providing $75 million for its implementation so that the American public will continue to enjoy one of the safest, most abundant, and most affordable food supplies in the world.

The President's Budget continues expanding the public's right-to-know about toxic releases in their local communities through several initiatives. One of those new efforts is a new environmental information system that will provide the public more critical environmental information than ever before. Under this Initiative, the Administration will provide $30 million to work with the states to provide one of the Nation's greatest sources of shared, key environmental information.

To better protect America's communities, the Administration is again proposing the Better America Bonds Initiative. This Initiative, which has increased by more than a billion dollars over 5 years from last year's proposal, will help communities grow in ways that ensure sustainable economic growth by providing them the resources they need to address local smart-growth challenges like protecting water

sources and shrinking parklands as well as cleaning up brownfields. Through this initiative, the Administration will provide the authority to issue $2.15 billion for investments by state, local, and tribal governments in 2001.

This budget provides almost $1.45 billion to continue our progress in cleaning up the Nation's Superfund toxic waste sites. The Agency plans to complete construction at 75 sites for a total of 830 construction completions by the end of 2001. This will keep EPA on a path towards meeting the President's goal of 900 construction completions by 2002. In the Clinton-Gore Administration, about three times as many Superfund sites have been cleaned up as in the 12 previous years of the program. The new budget proposal will continue that progress. In addition, to help communities return their abandoned or idled industrial properties to productive use, the President has committed $92 million for the extremely successful Brownfields redevelopment program.

The Clinton-Gore budget request for fiscal year 2001 protects public health and the environment by ensuring that we will be able to provide America with cleaner water, cleaner air, better protection of children, more protection for individual communities and a continuing cleanup of toxic wastes and restoration of Brownfields.

The Clinton-Gore Administration's budget protects the health and the environment of the American public. Last year, however, Congress "earmarked" from EPA's budget some $470 million for more than 320 special projects in individual congressional districts. These earmarks direct money away from the Agency's core programs—the very programs that keep the environmental cops on the beat, use the best science to set standards to protect our children, and support the work of our partners, the states, tribes and local governments. That is why we have continued the Administration's policy to not carry over earmarks into the new budget, and that is why we will continue to oppose earmarks this year.

We also remain strongly opposed to any legislative riders that undermine our country's basic environmental laws. Our goal is to work with Congress to provide real protections for the Nation. I strongly believe that the authorizing committees, the traditional forum for discussing these issues, should again guide the process.

By providing our children and our communities with cleaner air, cleaner water and an improved quality of life, this budget maintains the Administration's dedication to the protection of public health and the environment. It ensures that the Environmental Protection Agency will have the funds to continue the seven years of unprecedented environmental progress built under the Clinton-Gore Administration.

These are the highlights of our fiscal year 2001 request. I look forward to discussing with you, as the year progresses, these initiatives and innovative financing mechanisms. I would be happy to answer your questions at this time.

ENVIRONMENTAL INFORMATION: DATA GAPS

Senator BOND. Thank you very much, Madam Administrator.

You may recall 2 years ago, then-Deputy Fred Hansen indicated that environmental information issues would be a high priority. I am disappointed in the progress to date. We still do not have any overarching plan. A comprehensive error correction process is still not in place, as we understand it. We still do not have an inventory of key data gaps.

What is the problem? Why have not these things been done? And what has been accomplished in the last year?

Ms. BROWNER. Mr. Chairman, this is a very high priority for the Agency, and we have been working on it. For example, we have created a new Office of Information Management. One of the challenges, and you understand this, that we face that we had historical databases of environmental information in a variety of areas within the Agency which were collected under a variety of statutes. We are now in the process of bringing all of that together into one program. We are also looking at how to modernize ongoing data collection and how to better make that available to all of the parties that need it, which would include the States.

It is not without its challenges; it is an enormous undertaking. I would hope that the committee could look very seriously at our request for funding for the States. We will be able to do all of this

information integration and management in a much better way if the States are able to move along.

The interesting thing, Mr. Chairman and other members of the committee, is that this is not an issue of simply States that we would all perceive to be with the older environmental agencies or the more sophisticated environmental programs. It is a variety of States that are already doing it. We are providing some modest funds. We are asking for money so that all of the States can begin this kind of information upgrade, this kind of computer systems upgrade, and allow us to better manage environmental information across the country.

Senator BOND. Certainly assisting the States is a very, very important part and something that we would be supportive of, sure. But we do not see the plan of how it is going to work, how this is going to fit in with your plan. In last year's committee report, we noted that several action items, including establishing an agenda of information products, published semiannually, that would identify information products EPA is preparing for the public, establishing procedures to engage the public in development of information products that it offers the public, and we asked for a report by March 1 on policies to protect confidential business information. What progress has been made on these items on page 80 of the report from last year?

Ms. BROWNER. We will provide a status of the report to you within the next week. And I apologize for our tardiness in doing that. We do have a number of actions underway. For example, we are working with NACEPT to develop a long-term action plan. We will, next month, be putting out a short-term action plan. The first step was to integrate the office, and now we are developing those plans.

We are also working with NACEPT to develop external guidance on how best to approach our data needs and gaps. We would be happy to provide for you a full list of all of the things we have underway.

[The information follows:]

REPORT ON CONFIDENTIAL BUSINESS INFORMATION

As we reported to Committee staff in the Quarterly report on appropriation requirements, submitted March 17, EPA is reviewing claims of confidentiality, including "those claims that are based on the argument that multiple pieces of publicly available data can be put together to form a 'mosaic' picture of trade secrets." EPA held discussions with stakeholders about the mosaic effect as part of the EPA/State Stakeholder Forum on Public Information Policies, in Chicago on November 15–16, 1999 (for summary see EPA's Web site at www.epa.gov/oei/issuepapers). No consensus was reached on whether the mosaic effect exists, how extensive or serious it is, or how EPA could address it; in fact, no examples of harm where EPA was involved were noted. This lack of consensus was also reflected in the General Accounting Office's June 1999 report, citing the range of views expressed by industry representatives and competitive intelligence professionals.

OEI is now in the process of examining the mosaic effect in the broader context of revising the confidential business information (CBI) regulations (40 CFR, Part 2, Subpart B). This review will strive to ensure that the regulations are up-to-date, adequate, and effective. The Agency will also examine how different program offices categorize and protect various types of sensitive information, including confidential information.

As part of this effort, EPA will examine its statutes, regulations, and policies to determine the extent to which they may limit CBI claims. We plan to publish an advance notice of proposed rulemaking in late spring that will seek public comment on possible CBI revisions, including potential mechanisms for addressing the mosaic effect. The Agency also will convene a public meeting in early summer to solicit fur-

ther stakeholder comment on its CBI regulations. We believe the Agency can best address the issues raised in the Senate Committee report (106–161) through these efforts.

INFORMATION MANAGEMENT ACTIVITIES

Following are descriptions of other specific information management activities EPA has underway.

AGENDA OF INFORMATION PRODUCTS

The Senate Subcommittee's request that EPA establish "an agenda of information products" was raised and discussed at our Forum. Forum participants agreed that providing advance notice of significant products in planning and development stages, as well as opportunities for public comment and stakeholder involvement, would be very beneficial. They were concerned, however, that EPA not delay product development unnecessarily by developing a process that was too complicated. As a result, the Agency and our State and tribal partners have committed to establish a workgroup to explore the concept of developing an "information products bulletin" that would report on significant upcoming information products and provide opportunity for public comment and stakeholder participation in our product development process. The workgroup has been tasked with finalizing its recommendations on the scope of such a "bulletin" by this Fall and making the first "bulletin" available in early 2001. In addition, to assure some opportunity for notice on significant information products currently underway, an interim products bulletin is planned for this Fall.

PROCEDURES TO ENGAGE THE PUBLIC IN THE DEVELOPMENT OF INFORMATION PRODUCTS AND ERROR CORRECTION

As part of the development of our information products bulletin, the workgroup will recommend the process and appropriate means for members of the interested public to participate in the development of significant information products. In fiscal year 2000, the Agency will implement a web-based error reporting and tracking process for use by the public, States, and other EPA data users. The process will allow data users to report suspected errors in EPA data to the Agency and will track the error resolution process from initial report through final resolution.

ENSURING INFORMATION SECURITY—FIREWALL, TRAINING, AND VERIFICATION

EPA has taken a number of steps to install a full firewall system to protect EPA information systems from unauthorized intrusion. On February 20, 2000, the third and final component of the Agency's full firewall system was installed. The first two components, the network gateway firewall and the public access firewall, were already operational. The third component separates the rest of the EPA Wide Area Network from the Internet and includes automated intrusion detection technologies, as well as logging and analysis of accepted inbound traffic.

EPA has completed additional measures to strengthen its information security and plans to continue to expand and improve upon these efforts. These efforts include increasing Agency training on information security and the dissemination of information security policies and procedures via an Intranet site, through all-hands memos, and by means of seminars and conferences. EPA also is conducting analyses of its network architecture and investment review process to ensure that information security is adequately addressed. Finally, the Agency has expanded its testing and verification of computer security measures, including the use of independent analyses.

ENVIRONMENTAL INFORMATION: BURDEN REDUCTION

Senator BOND. We are concerned about this, because we have been working on this for 2 years. I have a memo that is getting a little yellow with age here, talking about sharing high-quality environmental data. It is from back in April 1998. And we are anxious to see all of these good things come to fruition.

In an EPA memo just 1 year ago, called "The Framework for Early Action Projects for the New Information Office," reducing reporting burdens is listed as a priority activity. But, again, when we get the GAO report on the EPA, GAO says EPA has been playing

games with the numbers and that the paperwork burden has increased. So I have questions about how much has been accomplished in this area.

Ms. BROWNER. Mr. Chairman, one of the responsibilities we have as the Environmental Protection Agency is to not only streamline requirements. We also have a number of ongoing efforts underway which you are very familiar with. They are not things that are achieved overnight. In some instances, we have to look to the States to implement them on a daily basis. We have to wait for the permits to come through the process.

On the other hand, and I want to be clear about this, this administration has been very committed to reinvention and burden reduction. We have also been committed to setting tough standards, requiring new reductions in pollution, and expanding the public's right to know. Thus, so when you talk about increases, a large percentage of those increases are tied to the very aggressive work we have had, for example, in our air pollution program, under the Clean Air Act. This is a new statute that we are implementing.

Under the Safe Drinking Water Act, the Consumer Confidence Report, which we worked with this committee and members of Congress to develop, requires time and energy for water systems to report to their consumers the condition of drinking water.

We have also expanded the public's right to know, under TRI. You are right in some instances, the numbers have grown. However, we believe that is part of how we better do our job, by requiring facilities that perhaps did not need them previously to get permits, to reduce their pollution, and by answering the public's right to know.

At the same time, we remain absolutely committed, within existing and new programs, at looking at how to streamline any information requests, and burdens that may be put on reporting industries.

Senator BOND. We will continue on that later. I just would note that we had been advised that there was a reduction, a 27-million-hour reduction. That did not happen. There are many aspects to that. We will deal with them later on.

I will turn now for questions to Senator Mikulski.

CORE BUDGET ITEMS

Senator MIKULSKI. Thank you very much, Mr. Chairman.

Ms. Browner, this is your eighth appearance and we do not know if it will be your final appearance. It is conceivable that a Gore administration would ask you to continue in the outstanding job that you have done. And that will be up to President Gore and you to decide.

I know Chairman Bond might have an alternative viewpoint on this. But, either way, when we pass our appropriations for fiscal year 2001, it will be the final days of the Clinton administration. And I would like to ask you what would you say are the three top things that are the must-do in this budget, to be able to stay the course and all the way through the first year of a new Administrator? What core budget items would you really feel is a must-do, that we really look at and ensure adequate funding to be able to continue the important mission of the EPA and have the tools for

either you or the next Administrator to have? What would be your top three?

Ms. BROWNER. First is to honor the President's request for an increase for the EPA core programs. As I said previously, this is the nuts and bolts of public health and environmental protection. EPA core programs are where we do virtually everything that results in a cleaner environment and more public health protection. It is an 11-percent increase.

Second, we are asking for fairly significant increases in money to the States to manage various water pollution programs. An example is the non-point source programs, the Section 319 grants. States are good partners in this effort, but they need Federal financial assistance in running their day-to-day programs. We have significant increases in this budget.

Finally, we have been very pleased that over the last several years this has not happened and will not happen this year, to have a bill that is essentially rider-free. One that does not restrict how we might go about or how the next administration might go about doing its job of public health and environmental protection.

Senator MIKULSKI. Well, I appreciate those. Let me then go to some specific things. Let us go to the brownfield issue. You visited something called the American Can property.

Ms. BROWNER. Right.

BROWNFIELDS

Senator MIKULSKI. This was an old factory that made tin cans, really. We had a cannery row in Baltimore. That moved out of the community and eventually out of the State. This factory has been recycled into a digital building. And now, 400 people work in it. So we are pretty brownfields exuberant actually.

My question to you is, what should we be doing to, number one, stay the course on brownfields and what improvements would you recommend that we could do through the appropriations, both in funding and fine-tuning some of the directions? Because I believe not only in my own community—3,000 acres, 3,000 acres of waterfront property that could be recycled into what now are dead zones, into prosperity zones. And I wonder what your recommendations for that.

Ms. BROWNER. We strongly recommend that the committee maintain the split in funding that we are requesting. If you think about the brownfields program, there are three big pieces to it. There are the site assessment grants which is what was used at the American Can site that you mentioned. There are the showcase communities. We are preparing a second round of those and, we would like to be able to continue those activities. Showcase communities are brownfield sites where not just EPA works, but we bring in a whole host of Federal agencies that can be helpful.

Finally, Mr. Chairman, if I might just take a moment, because I think this will be a source of some discussion in your future meetings, the revolving loan program. What you are going to hear, and this is absolutely true, is that only a handful of loans have been made. It is a new program. It takes a little bit of time to get these loans up and out the door. But, we are up and running now. Once

we are running, the worst possible thing to have happen would be to miss a year of funding.

It would be extremely important, once Congress made that decision. We asked for several years before you made that decision to continue funding the revolving loan program. I think it is a half-million dollars that goes out to local communities. The communities then loan the money out to perhaps a developer who cannot find a bank in the initial phases. The developer pays back the loan and another developer can become eligible.

SAFE DRINKING WATER ACT

Senator MIKULSKI. In my last few minutes, we talked about local cooperation. That takes me to the Safe Drinking Water Act, which is so crucial for our communities. A significant component of that Act was the new State revolving fund for the Nation's drinking water needs. Could you share with us the experiences you have had in implementing that? How would you assess it? And what improvements do you think you could make?

Ms. BROWNER. We think it has been incredibly successful since its inception in fiscal year 1997. Working with Congress, we have provided $3.6 billion in funding for the SRF program. And we really appreciate this committee's commitment and leadership on this issue. The States will soon make their one-thousandth loan under this program. In other words, 1,000 communities are benefitting from the work that we have been able to do together.

I think it is also important to understand that we are fulfilling the goals of the Safe Drinking Water Act with respect to assistance for small systems. Three-quarters of the loans made to date have gone to small water systems. These are systems that serve fewer than 10,000 people. It is not necessarily Baltimore which has the rate base and the expertise. It is the small systems where I think has been hugely successful. I just hope that we can continue to provide the funds to the States so that they can meet the needs of the smaller systems.

Probably the single greatest reason why we are seeing the upswing in the rate of compliance in drinking water systems across the country is the fact that these smaller systems have access to resources that they did not have previously.

Senator MIKULSKI. Thank you.

Senator BOND. Thank you, Senator Mikulski.

Senator Lautenberg.

KYOTO PROTOCOL: KNOLLENBERG LANGUAGE

Senator LAUTENBERG. Thanks Mr. Chairman.

Administrator Browner, it was nice to hear the testimony to you coming from both sides of the aisle, from the chairman of the committee, the chairman of the appropriations committee. So, be careful, it may cost you some money, but we have to take it whenever it comes.

EPA has been accused of kind of back-door implementation of the Kyoto Principles on Climate Change. Some people think the Agency is developing rules and regulations despite the fact that the Protocol has not been ratified. How do you respond to that?

Ms. BROWNER. We are absolutely in compliance with what I think is routinely referred to as the Knollenberg language. First of all, I think, as everyone knows, there is no Kyoto Protocol in effect in the United States. We are not doing anything at the Environmental Protection Agency to implement a protocol which is not in effect in the United States.

Having said that, we do believe that climate change is probably the most significant environmental challenge the world will ever face. We do have programs, many of them started under the Bush administration, where we work in partnership with the business community to help develop energy efficient products.

In fact, I was able to present awards to 25 new Energy Star partners, everybody from I think the State of New York to the private sector, who are investing in energy efficient technologies, which are good business, air pollution, and climate change decisions. This budget seeks an increase for those programs.

Senator LAUTENBERG. Thank you. If anybody has any doubts about the changes in the climate that we kind of see around us, I would suggest that all members of the Senate take the trip that I took just 2 months ago to go to the South Pole and see what is happening and watch the water run where ice used to be solid. And today they noted that an ice break was taking place that would result in an iceberg twice the size of Delaware floating in shipping channels out there. So keep up that focus.

Do we do anything to coerce developing countries into accepting the standards of the Kyoto Protocols? Because India and the President came to an understanding to protect the environment and develop clean energy resources. Is there anything that your Agency is doing?

Ms. BROWNER. No, absolutely not. We do work in partnership with countries around the world who are interested, for example, in exploring American technologies that may bring them clean air and clean water. But in no way do we have anything that "coerces". I cannot imagine how we would go about doing something like that. We do not.

BEACH PROTECTION LEGISLATION

Senator LAUTENBERG. You are aware of the fact that I have introduced legislation to improve water quality at our country's beaches. And we are working hard to pass a bill this year which would authorize funds for EPA, beginning in fiscal year 2001, to implement the legislation. How would the EPA go about implementing that if we were able to provide you with these funds?

Ms. BROWNER. We would be thrilled to accept the responsibility for implementing the program. One of the most important things I think that we can do is make sure, because of the way various States have handled beach monitoring, is to make sure there is some continuity, so that we can put in place what are the monitoring protocols and what are the reporting requirements. Your State is very successful and aggressive, but not all States are. We have a real disparity in the quality of the information. One of the first things we want to do is to put in place the requirements so that we are getting even information across the country.

You mentioned in your opening statement our web site. The effort is not because of any specific requirement that we are imposing, but rather through the public's right to know, to help local health departments or States really upgrade the quality of their information. We are starting to see some effect from that, but we certainly think your bill would be very helpful.

DOD'S APPROPRIATIONS BILL: ENVIRONMENTAL VIOLATIONS

Senator LAUTENBERG. There is a provision that was added to the conference report for fiscal year 2000 in the DOD appropriations bill. It said, "No funds appropriated may be used for the payment of a fine or a penalty imposed against the Department of Defense arising out of environmental violations."

Now, how has this worked in practice? I find it incredible to say that such an important part of our government, our Defense Department, our military installations, is exempt from monitoring and maintaining under environmental standards that we ask of everybody from the bakery shop, the cleaning store, on to giant industrial companies.

Ms. BROWNER. We share the concern. The Governors are equally concerned. The Governors feel it is extremely important that they have all of the tools available to them that the Federal laws give them under the Clean Air Act to enforce the environmental requirements and to collect penalties if there is a violation.

A Governor said to me recently, "It is just ridiculous"; we are out there enforcing against our cities and yet we cannot enforce against a DOD facility. They are very troubled.

The administration and the President, in signing the DOD appropriations bill last year, did so with objections to this provision. As I understand it, the administration has told DOD that they are to come to Congress and seek the authorization to pay the penalties, particularly where the States are asserting their rights to collect a penalty.

We strongly encourage Congress to reconsider the language. The administration has prided itself, and the President signed an executive order very early on, that Federal agencies would not be above environmental requirements. For example, under the President's leadership, for the first time ever, Federal facilities, including EPA, report under the Toxic Release Inventory.

We need to be good neighbors. Part of being good neighbors is honoring environmental requirements. If we fail to, then we should be subject to the penalties that any other business is subject to. Exempting DOD we think really flies in the face of that.

Senator LAUTENBERG. Mr. Chairman, thank you.

Thanks very much, Administrator Browner. I will miss you, even if you stay here with the Gore administration.

Ms. BROWNER. Well, I will certainly miss you. You have been a wonderful friend to the Agency.

Senator MIKULSKI. Mr. Chairman, if I could make some comment. I know that you are going to be at many other hearings on this subcommittee, but I would just like to acknowledge for the record the champion that Senator Lautenberg has been both on the authorizing and the appropriations for the environment, particularly his steadfast support for the SuperFund cleanup of toxic

waste and the innovative approach on brownfields. So, really, you very much are going to be missed. And I would like to personally and professionally thank you for your contribution.

Senator LAUTENBERG. Thank you.

Ms. BROWNER. Mr. Chairman, if I might just second that, and say to Senator Lautenberg, frequently over the years, when I have tried to understand why something is done at EPA, I will say, well, where did that come from? Who did that come from? More often than not, the answer would be, Senator Lautenberg's provision in this or that bill. You really have been a tremendous friend to the environment and to public health protections, particularly to the EPA. I thank you on behalf of all of my colleagues at the EPA.

Senator LAUTENBERG. Thank you.

Senator BOND. Thanks, everybody. I will miss Senator Lautenberg, too.

Senator LAUTENBERG. That is the sweetest thing you have ever said to me.

ENVIRONMENTAL INFORMATION INTEGRATION

Senator BOND. Madam Administrator, to come back to your last answer, you talked about the extensive information that you are getting in. And that is really why I am so concerned. Last year, we directed EPA to provide us with assurances, with verification from the I.G., that appropriate steps were being taken to install firewall systems, train staff and management on computer security, to test the integrity of the computer security measures on a periodic basis.

We need to be able to ensure good environmental information and we need to be able to protect from inappropriate disclosure the confidential business information that is reasonably disclosed to EPA. And when you have hackers getting in there and learning that information, perhaps changing or messing with the environmental information, we have got a problem. Clearly, according to the GAO testimony of last month, after more than 3 years, EPA has not fixed the critical problem of computer security.

And beyond dealing with the immediate crisis, we believe EPA needs a long-term plan for ensuring computer security. EPA must be on top of determining whether its intrusion detection systems are effective. The threats are changing very rapidly. The Office of Environmental Information, for example, must set standards and enforce them for computer security throughout the Agency.

I would like to know how we can be confident that EPA will put the staff and the contractors on board to address the problems. We need to know what assurances that you can give us. We know that EPA is requesting $30 million for a new environmental information integration initiative, yet we have received few details about that. So I would also like to know how the funds will be allocated, what will be the accomplishments this year, and is this a multi-year funding requirement?

Ms. BROWNER. Let me answer the last question first and then go to your earlier point. On the issue for the States, I will come back to it. While a lot of money, $30 million will not upgrade all of the States, it will take more resources.

Senator BOND. So it will take more. I just want to know, do you have a plan in place for how the first $30 million will be spent?

Ms. BROWNER. Yes, we do. I do not know if your staff has participated in this planning, however, other staff on the Hill have participated. We have had some States that have already developed programs come in and do a presentation of these programs. We would be happy to do that again. They are quite significant and really quite remarkable. They bring with them burden reduction for the reporting community and better data quality. We would be happy to do that.

[The information follows:]

ENVIRONMENTAL INFORMATION INTEGRATION INITIATIVE

The Agency's integration effort is foremost a partnership effort with the States to create and sustain a national environmental information exchange network. The scope of the effort is great. The States and EPA currently operate with a vast array of individual data and information relationships. Building these individual relationships into an integrated whole will involve developing and implementing smaller components (i.e., individual data standards, program specific data models, etc.). While each of these components will have work plans with detailed milestones and assignments of responsibility, there will also be an overarching blueprint or road map that ensures consistency and cooperation among the individual efforts.

We are currently working with the States to develop that blueprint. A critical part of our active dialogue with the State (though the Information Management Workgroup under the auspices of the Environmental Council of the States) is to ensure that we are prepared to make meaningful progress toward the network in fiscal year 2001. Together, we have identified a number of key areas for fiscal year 2001 action, which the President's $30M budget request will support: defining the functional and technical requirements of a data exchange network, jointly developing and implementing essential data standards—the core engine of information exchange and integration, developing the technical exchange protocols that allow web-based data exchanges across a variety of differing state and federal data systems. Even as we work on these foundation pieces, we will identify and pursue opportunities for establishing a number of State-EPA electronic data flows through a central exchange function. We anticipate that implementing the ever-advancing information technologies and the modernization efforts underway in a number of states will allow us to see a significant volume of data flowing in the emerging network in the next year. This approach, building the broad foundation even as we work with individual states on specific data exchanges will require us to provide resources to individual states (to take bold steps forward in electronic data exchange as well as to build capacity to participate in the network) as well as resources to broader collective efforts (like data standards and technical exchange protocols).

In order for EPA to be a full partner and equal peer in a State/EPA data exchange network, we will continue our efforts in fiscal year 2001 to modernize and integrate our internal information systems. EPA's role in this joint venture requires that our systems be integrated internally. Data contained in EPA's unlinked stove-piped information systems will not support a type of network that we and the States envision. In fiscal year 2001, we will build on efforts initiated in fiscal year 2000 to build a secure core of high quality integrated information. We will integrate across traditional program lines to allow multi-media geographic views of our information assets. The broad categories for this integration are: facility and place information, regulatory information (permitting, compliance and enforcement), chemical and pollutant information and ambient information. In fiscal year 2000 we brought together technical staff from EPA's programmatic information systems to define the requirements for an integrated system and plan for its creation. By bringing a diverse staff representing the Agency's main programs together, we have begun the important work of building Agency-wide support as well as identifying the priorities for integrating our internal information assets.

COMPUTER SECURITY

Senator BOND. We have had some summary briefings. We have not seen the plans. We would like to see the plans.

Ms. BROWNER. We will do that.

Mr. Chairman, on the issue of confidential business information and security, it is a fast-moving, dynamic world out there in the

Internet. Like many in government and the private sector, we are constantly looking at how to upgrade our systems. There were members of Congress aware of our plans. Specifically, they were aware of equipment to be installed, firewalls to be built, and the schedule for doing these. Unfortunately, after some statements made, we were advised that we had become a particular target for hackers and that the best thing we could do would be to bring our system down while we installed the firewalls. We were already planning to install these firewalls and had a schedule for installing and people were aware of that appropriately.

It was a difficult decision, because we do service a lot of people in industry, the public, and the States. But, we did make the decision.

I think it would be important to note here that we have no information, GAO has presented us with no information that I am aware of, that CBI information has been inappropriately accessed through our Web site. We are vigilant about that. We have to remain vigilant about it. We did have an issue with paper copies, and reported it several years. These were not in our Internet system.

Second, a number of the stories or reports about inappropriate access, or hackers as they are sometimes referred to, are situations which we ourselves found and disclosed to the GAO. That is the way it should work. It is not to say that we do not need external experts or external advice. We do have that.

Mr. Chairman, we would be happy, if we have not done so, to meet with your staff in a more private setting to go through with you a detailed description of the firewalls. There are reasons why that might be something we would not discuss publicly.

Senator BOND. Well, I think it is important. We certainly accept that opportunity. And it is important that we have, I think, the GAO and the I.G. involved, because they have done significant operations in this.

Ms. BROWNER. They have been involved.

Senator BOND. Three years ago, we said you have to have firewalls. And I am very disappointed that we are still——

Ms. BROWNER. We had firewalls, and we have been upgrading the firewalls. Mr. Chairman, as I am sure you know, this is a fast-moving world that we do this in. We have been upgrading our firewalls. We had a schedule to further upgrade them and those upgrades are now all in place.

Senator BOND. The other thing I understand from the GAO report is that you said there has been no access to confidential business information but, in reading the reports, I get the real sense that there is no means of detecting whether there has been unauthorized access. And that is one of the problems.

Ms. BROWNER. As far as I know, the GAO has not notified us that they are aware of access to CBI through our Internet. If they are, then it is news to me.

Senator BOND. Well, I am not saying that there is. I am saying that there is no means of determining whether there has been or not.

Ms. BROWNER. Part of the firewalls are enhanced intrusion devices. I do well to turn on my computer.

Senator BOND. I have to have help.

Ms. BROWNER. That is why I have a 12-year-old. He comes around to help.

Senator BOND. Let me turn to Senator Mikulski. Further questions?

Senator MIKULSKI. Mr. Chairman, I had to step outside for a minute. Were you going over the information security system?

Senator BOND. Yes.

Senator MIKULSKI. Do you feel that you have covered the ground that you needed to?

Ms. BROWNER. Pretty good.

Senator BOND. We are going to get together again.

Ms. BROWNER. We are going to have a private meeting on the firewalls.

Senator BOND. We are going to open some sodas and cook some hamburgers and talk at length about this.

Senator MIKULSKI. You better watch about those emissions when you do that killer grilling.

INTERNET SECURITY

I, too, am concerned about the information security aspects. First of all, we were glad that we got through Y2K. And I think while we are looking at what we need to really develop, I think it has really served the Nation well that we did not have the computer glitches that could have caused serious problems in our water supply and our waste water and so on had that not worked at the State and local level. And I know that you, as well as the President's task force, worked very hard with the Governors and FEMA on that. So that was very, very good news.

But I, too, am concerned about these security issues. More and more people are going to be turning to EPA and they are going to be wanting to go to your Web sites and so on. In many ways, that really can help a lot with the right to know. Then they can get back to you on the right to be heard. But, again, there are these security concerns. And when you have this private meeting, either I or my staff would like to participate in them.

Ms. BROWNER. Thank you.

PUBLIC HEALTH

Senator MIKULSKI. I would like to be able to go to the issues related to your interagency help. Because I am really tremendously interested in the public health linkages. EPA, in your strategic plan in 1997, found that there were over 25 Federal agencies that require greater integration and review of efforts in terms of public health. Could you tell me what you have been doing on the issues of asthma, and then, if we have time, on the issue of lead paint? Because this cuts across what EPA needs to be doing.

You are not meant to be a public health—I mean we have Dr. Satcher, who is the Surgeon General, but so much of this goes across community lines, I mean agency lines.

Ms. BROWNER. We agree. I think one of the real successes of this administration has been the increased work across agency lines. Two things that I will mention. One is regarding asthma. I co-chair the President's Kids' Health Task Force and many other agencies participate in. Together we have put forward a coordinated asthma

strategy, bringing together the expertise of the various agencies. We do seek funding in this year's budget for implementation of that strategy.

Second, we have developed a coordinated lead strategy. It goes beyond agencies you might even think would be part of a lead solution. Obviously HUD needs to be an important part. We work very closely with them in terms of enforcement. But we are also bringing in the Department of Energy. A lot of lead contamination in older housing is a product of opening and closing old windows. The dust comes down, the kids play in the dust, and they ingest it.

As you look at energy efficiency, as upgrades in these older housing stock, you can replace the window, resulting in increase energy efficiency and lead abatement. And we are continuing to expand our efforts with other agencies on lead abatement.

Senator MIKULSKI. What have you found to have been the major causes of asthma? And what has been the role of EPA in dealing with this? Asthma, particularly among children, and we see this both among the children of the poor, but as well as the children of the middle-class, that it has in many of our schools, reached epidemic proportions. Many of the children who require medication during school are asthma kids. The question is always, who can give the medication? Those are legal issues. But I am really worried about this, and our school system is really worried.

Ms. BROWNER. We have worked with Hopkins on the asthma issue. The role of the Environmental Protection Agency is in setting outdoor air quality standards. What the scientists and the public health experts tell us is that we do not necessarily know why one child is an asthmatic and another child is not an asthmatic. They cannot answer that question yet.

What they do know and the many studies that have looked at this, is for an asthmatic child, when the air pollution reaches certain levels, the quality of their attack will be worse. There are extensive studies involving what are called the summer camp kids in New Jersey, where it actually charts their breathing at any given moment. The air pollution goes up and the severity of their attack goes up.

This has been our primary focus. We recognize that it is a crisis and an epidemic. It is the single largest cause of childhood hospital admissions in the United States today. We are also working through our indoor air program and through our Tools for Schools Program, to provide some advice and some ideas on how to help reduce the children's attacks and some of the exposures beyond the work we do on outdoor air.

Senator MIKULSKI. Thank you.

Thank you, Mr. Chairman.

CLEAN WATER: GAP ANALYSIS

Senator BOND. Thank you, Senator Mikulski.

Madam Administrator, in our hearing last year, we talked about the gap analysis that EPA was working on for water infrastructure funding needs, which identified a $200 billion need, excluding replacement costs and operation and maintenance. One year later, it still is not out. We have a copy of a presentation the EPA made recently on the gap analysis. It lays out a few critical facts: Waste

water capital investment is declining, but it needs to double; the annual gap in capital spending for waste water treatment is increasing; the amount paid by consumers in waste water treatment user fees has doubled in a little over a decade. It recommends increasing SRF authorizations and Federal grants.

In view of the funding gap for water infrastructure financing of at least $200 billion, coupled with the prospect of new TMDL requirements, and your own analysis would suggest a larger Federal role is needed, why is the President's budget cutting, once again, the Clean Water SRF by 40 percent?

Ms. BROWNER. Mr. Chairman, we discussed this last year. We continue to believe that we have to modernize and reauthorize the Clean Water Act and then, with that, provide the appropriate funding. The administration made a commitment at the beginning of the administration to have the Clean Water SRF, which is one large and important part of solving water pollution challenges in this country, but it is not the only part.

We made a commitment to have that portion of it revolve at $2 billion annually, in terms of loans going out annually, by the year 2002. We are going to be there before that. The money is moving at the rate that we promised the cities. We think it is now time to focus all of our efforts on modernizing the Clean Water Act. It has not been reauthorized in a significant period of time. We know a lot more about remaining water pollution problems and how to create a funding mechanism for States and local governments that speak to the whole host of remaining issues, from upgrading sewer plants to dealing with polluted runoff.

We have money in this budget request outside of the SRF for the dollars that go to States. As I mentioned in the previous answer, the Section 319 money gets increased as well as the TMDL money. TMDL is a base of $115 million. We would increase that by $45 million. Section 319, the non-point, or polluted, runoff money would get a 25-percent increase. It would go from a base of $200 million to $250 million.

We are asking for specific money for the States. You and I do not have a disagreement over the long-term infrastructure funding needs. We simply would request that that be done through a reauthorization process, to look at all of the issues.

Senator BOND. It is interesting that not having an authorization is given as a reason OMB has not submitted to us requests for adequate funding. At the same time, we get requests for funding for clean air partnerships and a host of other unauthorized programs. We have fought to raise the amount spent on the Clean Water Revolving Fund each year, and that is the only reason we are getting up close to $2 billion. But even that $2 billion fund, given the information that we have, is woefully inadequate.

Your own Agency officials have said the United States now spends about $9.4 billion annually on waste water and wet weather infrastructure, but needs to spend $15 billion. And by the year 2020, the annual investments needed will be $21 billion to meet the projected waste water treatment needs alone. Are you saying that having a $6 billion annual funding gap is acceptable in this?

Ms. BROWNER. No, we are not suggesting that. We want to work with Congress, to modernize the law and the funding programs.

I am not sure what copy you have. I think it may be a copy we provided to your staff of our initial gap analysis. We are finalizing that, as I promised you we would do. We will be back up in April to give you the final report. Hopefully, that can form a basis for working together, through this committee and the authorizing committee, to find the appropriate legislation and then the appropriate funding.

Senator BOND. Again, I would like to see the Clean Water law reauthorized. As far as I know, there are not any problems in the SRF's related to the authorization.

Senator Mikulski, do you have any further questions, or can we finish it up?

Senator MIKULSKI. No, Mr. Chairman. We can finish it up.

TMDL

Senator BOND. Okay, we will go very quickly, and I will try to summarize these things.

Senator MIKULSKI. Very good.

Senator BOND. We appreciate very much your participation.

Ms. Browner, you support flexible approaches to achieving environmental standards. Yet the EPA TMDL approach is the old style, command and control, one size fits all. As an example, concerns have been raised by experts that EPA's proposal discourages a cap-and-trade system for reducing nutrients in surface water. Is not a cap-and-trade system one of the most promising means for meeting water quality standards?

Ms. BROWNER. If someone has suggested that we are opposed to cap-and-trade and TMDL's, they are categorically wrong. We are not. They provide a huge opportunity for finding cost-effective solutions. I have been a big proponent of them in the air pollution programs where they are used to great success. We would like nothing better than to see States use them as a very efficient tool for addressing remaining water pollution problems.

Senator BOND. We had the testimony of Leonard Shabman and Kurt Stephenson, agricultural economists in Virginia Tech's Department of Agriculture and Applied Economics. They were the ones who said it would.

Ms. BROWNER. I do not think they work for EPA. EPA likes these programs.

Senator BOND. No. That is why I said experts, people who are looking at it from academia.

EPA determined the proposed rule does not contain a Federal mandate that would result in expenditures of $100 million or more for State, local and tribal governments. Most of us here are absolutely astonished at that conclusion. The States have indicated to us that the estimate is at least $600 million per year, based on the average cost of TMDL's developed to date.

What has been your experience with the TMDL's developed to date? Do you have a cost on that or do you want to get back to me with that?

Ms. BROWNER. Yes, I think we should do that.

One of the reasons, Mr. Chairman, just quickly, we had proposed this—well, there are many reasons in the Clean Water Act, of course.

But second, we are being sued. The cause of action, as created in the Clean Water Act lies against EPA not against the States, for failing to set these loads and developing sensible plans to achieve the load reductions. So one of the reasons we have come forward with a rule is to get out from under this litigation. What we have are judges saying, do it more quickly, do it in 7 years. We are proposing 15 years for the States.

So we have now done some of these. So we would be happy to give you a figure on what any individual one that we have done has cost.

[The information follows:]

ANALYSIS OF THE INCREMENTAL COST OF PROPOSED REVISIONS TO THE TMDL PROGRAM REGULATIONS

INTRODUCTION

This report estimates the incremental costs of EPA's proposed revisions to the TMDL program regulations. The costs estimated here are the costs of the revised TMDL program beyond those that will be incurred for the base program—beyond those that would be necessary to meet the requirements of current regulations, consent decrees and State commitments. For the purpose of estimating incremental costs, the proposed regulatory revisions can be grouped into Five categories:

I. Changes affecting the listing program.—The changes clarify or revise the format and content of the State 303(d) submissions, and also require additional public participation. The proposed regulations also request comment on options that may alter the required frequency of submissions ranging from leaving the frequency at the current two years to reducing it to once every four or five years.

II. Changes affecting the development and content of TMDLs.—The proposed regulations specify elements that must be included in each TMDL, including an implementation plan. Enhanced public participation in developing TMDLs is also required. Most of the specified TMDL elements are already required by existing regulations. The new required elements for TMDLs do not mandate additional monitoring, data acquisition or analysis, but specify that existing information that must be obtained anyway for other ongoing water program purposes should be organized, formatted or reported in a new manner.

III. Changes affecting the schedule for completing TMDLs.—The proposed regulations specify that all required TMDLs must be developed within 15 years, and that TMDLs for high priority waterbodies must be developed first. For those few States that have not already committed to a schedule of 15 years or less, this requirement will mandate an acceleration of program effort.

IV. Changes affecting Agency effort.—The proposed changes in the listing program for States will result in increased EPA effort, and proposed changes in the content of TMDLs will increase the Agency's effort in reviewing TMDLs. The proposed regulations highlight an option for the public to petition EPA to take a desired action rather than proceeding directly to litigation. EPA also will propose to provide reasonable assurance for implementation of a TMDL when a State does not do so—the specific procedures are included in the proposed revisions to the Agency's permitting regulations, and a separate analysis addresses the incremental costs that may result.

V. Summary of the impact on the Agency's Information Collection Request.—The Agency is in the process of renewing its Information Collection Request for the 305(b) and 303(d) programs. The proposed regulations increase the level of effort estimated by the Agency for States and for EPA. However, the savings that can result from adopting an option to reduce the frequency of the required 303(d) lists could more than compensate for the increased burden from the other changes affecting the listing program.

In no case do any of these proposed revisions require any new monitoring or data collection. States are already collecting the needed information as part of this program or under other parts of the water program. In some cases, it may be necessary to accelerate the development of information that is already required. By and large, the intent of many of these requirements is to improve efficiency and national consistency by establishing uniform formats, eliminating ambiguities, encouraging prudent planning, improving information for public participation, and perhaps by extending the intervals between required 303(d) lists. However, we recognize that

States meeting these requirements for the first time will likely require additional effort in the near term, while the benefits will accrue in later years.

The remainder of this introduction summarizes the estimated costs of the proposed regulations and outlines the general procedures we used to develop the estimates. The remaining chapters of the report are organized according to the five categories described above. In each chapter, each proposed regulatory change is described in terms of its effect, its relation to the baseline, and its potential incremental cost.

SUMMARY OF ESTIMATED COSTS

The following summarizes the results of this analysis for those aspects of the proposed rule that are expected to result in incremental costs or savings to States and to the Agency. In addition, these incremental costs are placed into perspective by comparing them to the cost of ongoing State, Territorial and authorized Tribal programs for water quality.

Overall Summary

The following table summarizes the results of this analysis for those aspects of the proposed regulations that are expected to result in incremental costs or savings to States. As shown in the table, the proposed regulations are expected to increase the costs to States by approximately $10.3–$24.4 million annually from the present through 2015. As shown in the summary table, the bulk of the additional costs ($10.1–$23.8 million) are associated with the proposed requirements affecting the content and development of TMDLs. For the listing program, if the listing cycle is lengthened, then the resulting savings could offset the increased listing costs associated with the proposed regulations.

The Agency anticipates that its costs will increase significantly in the future, primarily as a result of the increased State activity for developing TMDLs that is expected to occur in the baseline. As reflected in the Agency's proposed Information Collection Request, the Agency anticipates that its annual burden for the 303(d) program will increase from about 600 hours annually to about 6,600 hours annually. The bulk of this increase (5,600 hours) is for increased Agency effort for approving or disapproving TMDLs that are developed by States—this burden will occur regardless of the proposed regulation. As already reflected in the EPA's proposed ICR for the period 3/1/99–22/28/01, the Agency anticipates that the proposed regulation will further increase its burden by about 450 hours annually at a cost of about $18,000 annually. If the listing cycle is lengthened, then the savings that result to the Agency would offset the increased burden associated with the proposed regulation.

Perspective on the Magnitude of These Incremental Costs

The requirements of the proposed revisions will impose a relatively small additional cost to ongoing State, Territorial and authorized Tribal programs. In fiscal year 1999 States, Territories and authorized Tribes will receive $200 million for nonpoint sources under section 319. This represents an increase of $100 million dollars specifically targeted for implementation of the Clean Water Action Plan. Identifying impaired and threatened waterbodies and initiating activities designed to attain water quality standards is a key part of establishing TMDLs. In addition, States, Territories and authorized Tribes will receive $105 million under section 106 for implementing their water quality management programs, including the development of lists of impaired and threatened waterbodies and establishment of TMDLs as required by section 303(d). Thus, the proposed regulation's incremental costs of $10.3–$24.4 million represent only 3–8 percent of the amount of support provided annually by the federal government for these programs, and undoubtedly a much smaller proportion of the total State spending for these activities.

The proposed regulation is expected to increase EPA's costs by $18,000 annually. This is an insignificant increase compared to the overall annual cost of $279 million budgeted by EPA for water quality program management.

As the number of waterbodies identified stabilizes and increasing numbers of TMDLs are established, the additional annual costs associated with the proposed regulation are expected to decrease. At the same time, water quality will improve as TMDLs lay the groundwork for more cost-effective and improved controls.

Summary of the Incremental Costs and Savings To States Associated with the Proposed Regulations

[In millions of dollars]

Proposed Revision	*Annualized Cost*
Changes to the Listing Program:	
I.5. Listed waterbodies are grouped into 4 Parts. Only Part 1 waters require TMDLs. H/M/L priorities must be set for Part 1. (Additional public part. cost is included in 7)	0.02
I.6. A State's list must include a schedule for establishing each TMDL	0.01
I.7. Listing methodologies must be subject to public review and submitted to EPA by January 31 each year a list is due	0.19
I.8. A new format is prescribed for the listing methodology	0.01
Subtotal Annualized Cost	0.23
I.10. Option C: Changing to a 5-year cycle from a 2-year cycle after the 2000 listing	(0.32)
Subtotal Annualized Cost Including Option C	(0.09)
Changes Affecting the Content and Development of TMDLs:	
II.1. TMDLs must include specified elements (costs are for implementation plan)	5.3–14.3
II.2 Minimum required public participation in TMDL development	4.8–9.5
Subtotal Annualized Cost	10.1–23.8
Changes Affecting the Schedule for Completing TMDLs:	
III.2. TMDLs for all Part I waterbodies must be developed within 15 years of listing	.01–.4
Subtotal Annualized Cost	.01–.4
Total Annualized Cost (Excluding Savings from I.10. Option C)	10.3–24.4

METHODOLOGY—GENERAL PROCEDURES FOR DEVELOPING THE COST ESTIMATES

This section reviews several general elements of our cost estimating methodology. We use the approach described in this section to develop, in subsequent chapters, estimates for the costs of the individual provisions of the proposed regulations. This section covers the following topics:

—Definition of the Baseline
—Data Sources
—Time Period for Cost Estimates and Annualization Procedure
—The Number of TMDLs to Be Developed
—Labor Rates and Costs for Supervisory and Clerical Functions
—Affected Entities
—Costs When EPA Performs a Function Rather Than a State

Definition of the Baseline

Estimates of the incremental impact of some of the proposed revisions are sensitive to how the baseline of current program requirements is defined. The more that is said to be already required in the baseline, the less is the incremental burden of the proposed regulations. For this report, the baseline has been defined as the greater of:

1. The requirements of existing TMDL regulations, other existing water program regulations, and consent decrees affecting the program; and

2. Current State program practice, as reflected in the combination of recent State TMDL program performance and commitments the States have made regarding future performance.

Practices called for by EPA's TMDL program guidance materials—to the extent they go beyond existing regulatory requirements and to the extent State performance falls short of them—are therefore not included in the baseline.

Several examples will clarify the application of this definition. First are instances where State practice falls short of existing legal requirements:

—In some cases, existing Federal regulations require States to do something that they may not have done in practice. For example, existing regulations[1] require each State to describe the methodology it used to develop its 303(d) list. Despite the existing regulation, in some cases some States have not provided this description of their listing methodology. The proposed regulations restate and clarify the requirement to describe the listing methodology. Under our definition of the baseline, we attribute no incremental cost to this provision of the proposed regulations. States are required by existing regulations to describe their listing methodology. The cost of doing so is associated with the current program; it is not a cost of the proposed revisions.

—The proposed regulations go further to specify the format of the State's description of its listing methodology. This does not appear in existing regulations, and few if any States have described their listing methodology in this manner. In our view, this proposed requirement does impose incremental costs beyond the baseline. The incremental costs we estimate, however, are not the entire costs for a State to describe its listing methodology, but the added costs of describing the methodology in this particular manner. A description of the State's listing methodology and the on-going costs of preparing the description are part of the baseline. The costs of this proposed regulatory provision are whatever additional costs accrue in providing the description in this more specific format rather than in the less specific format that would suffice under the existing regulations. Further, the effort to reformat the description would only be a one-time cost.

In other cases, State practice exceeds what is called for by existing legal requirements (current regulations and existing consent decrees). Here we assume that States will continue their current practice, and the proposed regulations will impose costs only to the extent that they require more than what States are currently doing. Here are two examples:

—Existing Federal regulations do not explicitly require an implementation plan as a part of each TMDL. The consensus among TMDL practitioners, however, is that a thorough TMDL should include such a plan, describing how the TMDL decisions will be implemented and how progress will be monitored toward attainment of the water quality standards. Accordingly, many of the TMDLs that States have developed recently (perhaps roughly ¼ of them, as discussed in chapter II) have included an implementation plan, even though EPA regulations have not required these plans. The proposed regulations will now explicitly require implementation plans for all waters for which TMDLs will be developed. We assume in the baseline that States will not backtrack on their current practice of preparing these plans for about ¼ of the TMDLs. In the absence of the proposed regulations, States will continue to do this. We therefore estimate that the incremental cost of the proposed regulations requiring these plans will be roughly the average cost of preparing such plans for a typical TMDL multiplied by ¾ of the total number of TMDLs to be prepared.

—Existing Federal regulations do not specify the time by which a State must complete TMDLs for all its listed waters. Nevertheless, due to public pressures, legal action and other factors, most States have now committed to complete their TMDLs within some specified time frame. Eleven States have signed consent decrees committing to deadlines for completing all their TMDLs, and 40 additional States have made other deadline commitments to EPA. States have chosen a variety of time frames for completing their TMDLs, ranging from as little as three years to as many as twenty. The proposed regulations will now require all States to complete their TMDLs within 15 years after listing, thus effectively requiring that all TMDLs for waters listed in the year 2000 (the first list to which the new regulations would apply) must be completed by 2015. We assume the existing State commitments to be part of the baseline—we assume that State practice will match what they have committed to. All but 4 of the States have committed through consent decrees or otherwise to complete TMDLs for all their currently listed waters by 2015—3 states are in the process of making their commitments and one state planned on completing its TMDLs by 2018. Thus, the proposed regulations may have an incremental impact on these four States to the extent it requires them to accelerate their planned pace for completing their TMDLs.

To summarize, the baseline we define for purposes of incremental costing is the greater of existing legal requirements (regulations and consent decrees) and existing practice (recent State performance and commitments).

[1] 40 CFR 130.7(b)(6).

Data Sources

Most estimates of the amount of staff level of effort (LOE) needed to perform a new task required of States by the proposed regulations have been provided by a State representative. Estimates of the State LOE associated with the baseline 303(d) listing program have been drawn from EPA's analysis of the respondent burden for this program as reported in the Agency's most recent approved Information Collection Request (ICR) submission. Similarly, estimates of the Federal LOE required for tasks under the baseline listing program are also drawn from the ICR.

Other information is drawn from a review of State 303(d) list submissions, TMDLs submitted to the Agency, and a data base of listed waters prepared by Tetra Tech, Inc.[2] This information was current as of early December, 1998. It includes those State list submissions and TMDLs received by EPA Headquarters and entered into the data base as of this time. For most States, this means their 1998 lists, but for some States that had not yet submitted their final 1998 lists or for which data base entry was not yet complete, our information is based on their 1996 lists. This information can be updated as more 1998 lists are submitted and analyzed. The cost estimates will likely change slightly as this newer information is incorporated.

Time Period for Cost Estimates and Annualization Procedure

The first 303(d) lists to which the proposed regulations will be fully applicable will be the lists to be submitted in 2000. The proposed regulations will require TMDLs for all listed waters to be completed within 15 years, by 2015. We have chosen the time period for the cost analysis as extending from the beginning of 1999 through 2015 so as to encompass the full cycle of program activities for this set of waters—from initial work on the listing through completion of TMDLs for all these waters. We estimate the incremental costs associated with each provision of the proposed regulations over this 17 year period. Some of these costs will occur once during this period (such as the one-time costs associated with adopting a new format), some will occur several times (e.g., under one option proposed for the listing program, lists will be required to be submitted every 5 years, starting in 2000 and then in 2005, 2010 and 2015), and some will occur each of the thousands of times a TMDL is developed during this period. In each case, we estimate the amount of the cost and how often and when it will recur during this period. Projected costs are then summed for each year from 1999 through 2015 and discounted back to the beginning of 1999 using the OMB-recommended real discount rate of 7 percent annually. When discounting, we assume that all of the costs incurred in a year occur at the beginning of the year—this is a conservative assumption that tends to increase the present value cost of the proposed regulations. We then annualize this present value figure over the 17 year period of analysis. The result is the estimated annual cost of each proposed regulatory requirement.

The Number of TMDLs to be Developed

One of the most important data elements needed in estimating the costs of the proposed regulations is the number of TMDLs that will need to be developed over this time period. Some of the proposed regulatory requirements increase or accelerate the cost of developing a typical TMDL. The total cost of such requirements can generally be estimated by multiplying the cost increase for a typical TMDL by the number of TMDLs to be developed. Unfortunately, there are several unknowns in estimating the number of TMDLs to be completed.

The best initial indicator of the number of TMDLs is the number of waters listed by States in their 303(d) lists. By combining the most recent lists from each State, we estimate a current national inventory of some 20,198 listed waters. The ultimate number of TMDLs needing development will differ from this number for several reasons:

—Several sorts of waters must be included on States' 303(d) lists even through they will not in the future need TMDLs developed for them. These sorts include: (1) Waters that are impaired or threatened by pollution (e.g., flow alteration or exotic species) rather than pollutants and that are thus not amenable to TMDLs; (2) Waters that have already had TMDLs developed for them, but for which WQS have not yet been attained; and (3) Waters that are impaired, but for which planned activities other than TMDLs will bring them into attainment. Under the proposed regulations, these three sorts of listed waters not needing TMDLs would be classified in separate parts of a State's 303(d) list.

—Many additional currently listed waters will eventually prove not to need TMDLs. States often list waters on a conservative basis, choosing to list a water

[2] Kevin Kratt, Tetra Tech. "Updated memo on TMDL listing and development questions relating to EPA's new regulations." November 20, 1998.

even though the information suggesting that it is impaired is very limited. Subsequent monitoring may find that the water is not impaired and need not be listed.

—On the other hand, not all the waters that will eventually need TMDLs are currently known and listed. States have monitored or assessed only a fraction of their waters. As assessment and monitoring efforts expand to more of the Nation's waters, more impaired waters needing TMDLs will be found. The States' 303(d) lists submitted in 2000 will undoubtedly include some waters recently discovered to be impaired that were not on the 1998 lists. Similar additions will occur in the lists due in future years after 2000.

Some perspective on the likely balance between the factors tending over time to increase the number of listed waters and other factors decreasing it is provided by the change between 1996 and 1998 in the number of waters listed by States. For the 38 States for which 1998 list data has been tabulated, the 1998 lists in total are about 35 percent longer than the 1996 lists. This suggests that the discovery over time of new impaired waters that should be added to the lists has had a greater impact than the process of paring the lists down by eliminating waters that really do not need to be listed (in effect, that the third of the bulleted factors mentioned above has outweighed the second).

Additional factors complicate the relationship between the number of listed waters and the number of TMDLs that will need to be done:

—Many listed waters have more than one cause of impairment, and a TMDL may be needed to address each cause. For the 1998 303(d) lists, there are about twice as many causes of impairment as waters. If each cause were to require a separate TMDL, then about twice as many TMDLs would be required as there are waters. However, it is often possible to develop a single TMDL that simultaneously addresses multiple causes of impairment in a water.

—The geographic scale at which TMDLs are developed may not match the scale at which waters are listed. Some listed waters are very large, and multiple TMDLs will likely need to be developed for different portions of a single listed water. Conversely (and probably more commonly) some listed waters have water quality problems and potential solutions that are very closely related to those for adjoining listed waters, and a single TMDL can be developed on a watershed basis addressing a set of several listed waters.

In sum, there are large uncertainties about how many currently listed waters will not need TMDLs done for them, about how the number of listed waters will change over time, and about how many TMDLs will be needed per listed water. Assessing the combined impact of the various factors affecting the relationship between the number of currently listed waters and the number of TMDLs that will eventually need to be done through 2015 is extremely difficult. Our rough guesses are that:

—The three factors we cited initially—the three sorts of currently listed waters that will not need TMDLs, the deletion from the lists of waters that ultimately prove not to be impaired, and the addition to the lists of additional waters found to be impaired—on balance will result in a number of waters eventually needing TMDLs that is somewhat greater than the current number of listed waters.

—The "causes" information suggests that a minimum of 1 and a maximum of 2 TMDLs on average will need to be developed per listed water.

—The frequency of geographic consolidation of TMDLs (developing one TMDL on a watershed basis that covers several listed waters) will prove much greater than the frequency of geographic disaggregation (developing multiple TMDLs to cover disparate sections of a single listed water).

On balance, we will assume, we believe conservatively, that the roughly 20,000 currently listed waters will result in the need to develop between about 20,000 and about 40,000 TMDLs over the period from the present through the year 2015.

Labor Rates and Costs for Supervisory and Clerical Functions

A State representative provided an estimate of $80,000 as the typical current fully loaded cost (including salary, all benefits and indirect costs) of a technical State FTE with typical qualifications for performing TMDL work. This is generally consistent with estimates made by states that have prepared workload estimates for their water quality and TMDL programs.[3] By contrast, the cost of an EPA FTE

[3] For example, the Washington State Department of Ecology developed a detailed workload model for their TMDL program. For this model, they estimated that the current annual cost of an FTE is roughly $80,000 per year. (Total Maximum Daily Loads Workload Model, Program Definition and Cost. Department of Ecology Publication # 98–26, July 1998, page 9).

working on the 305(b) or the 303(d) program has been estimated to be somewhat higher, at $83,971 per year.[4]

The State representative also expressed some concern that EPA's proposed TMDL program regulations might slightly increase the average quality of the State technical staff needed (e.g., the increased public participation requirements would increase the need for skilled public meeting facilitators) and increase States' needs for travel money and laptop computers. He suggested that, in order to be conservative in our cost estimates, we might want to assume that the additional State LOE required by the new regulations, with support, might cost slightly more than the $80,000 figure for the fully loaded average cost of an FTE under the current program. In response to this suggestion, we have assumed that the additional State LOE required by the new regulations will cost as much as an EPA FTE, or $83,971 per year. EPA's recent ICR makes the same assumption that State FTEs cost the same as EPA FTEs. On an hourly basis, this is the equivalent of a fully loaded cost of $40.37 per hour. In this cost analysis, therefore, we assume that incremental State technical LOE required by the proposed regulations costs $40.37 per hour.

This accounts for the cost of the incremental technical staff hours. To this we add the costs of clerical and supervisory support for the technical staff hours, as follows. The State representative cited the detailed study conducted by the State of Washington that found that one clerical worker was needed for every 8.5 technical staff and one supervisor was needed for every 7.7 technical staff. Together, clerical and supervisory personnel needs are thus approximately .25 FTE for every 1 technical FTE.[5] We thus added a 25 percent factor for clerical and supervisory support to the estimates provided for the technical LOE needed to accomplish a task required by the proposed regulations. All the LOE estimates provided in this report include this 25 percent factor, they therefore include both the technical and the clerical/supervisory support needed to meet the requirements of the proposed regulations.

Affected Entities

In this document, we use the term "States" for convenience to include the 50 States plus the District of Columbia, Puerto Rico, the Virgin Islands, American Samoa, Guam, and the Commonwealth of the Northern Marianas. When we refer to the cost for a typical State to perform an activity, we mean the average cost that will be incurred across these 56 entities. We will often then multiply this average cost by 56 to obtain a national cost estimate. In the future, Tribes may apply and be authorized to implement the TMDL program for their waters. If so, the average cost per "State" would need to be multiplied by more than 56 to obtain a national cost estimate.

Costs When EPA Performs a Function Rather Than a State

Many TMDL program activities must be performed by EPA in instances when a State fails to perform a required function. When this happens, it is likely that EPA's cost of performing these functions will be higher than the State's costs for several reasons: EPA's performance in stepping in for a State will likely be less efficient than the State's performance would have been; EPA personnel will be less familiar with the particular State context and because of increased travel needs, EPA's LOE would probably be greater than the State's would have been.

We have not estimated in this report the likely increased costs for EPA to perform a required TMDL program function when a State does not perform it. There are several reasons why we have not made such estimates:

—Most importantly, it is EPA's expectation that in virtually all cases the States will perform the functions that are being asked of them. Two primary purposes of the proposed regulations and supporting draft guidance are to clarify and bring consistency to the TMDL program and to provide States with the necessary information so that they will fully and successfully implement the program.

—Apart from the reasonable assurance issue, we have no reason to foresee any instances in which a State is unlikely to perform a required function, and no basis for estimating quantitatively how often States might not perform required functions.

However, in the case of the reasonable assurance requirement, States may occasionally be unable to meet a specific requirement of the proposed regulations. The

[4] EPA's recent ICR for the 305(b) and 303(d) programs assumed that work was done by staff at an average salary level of Grade 10 Step 7, and applied an overhead rate of 110 percent. Using 1998 salary rates, this amounts to a loaded labor rate of $83,971 per FTE.

[5] 8.5 technical staff per 1 clerical staff means 118.5 or 0.1/8 clerical per technical. 7.7 technical staff per 1 supervisory staff means 1/7.7 or .130 supervisory per technical. Summing the two gives .248 clerical plus supervisory per one technical.

specific procedures for this requirement are included in the proposed revisions to the Agency's permitting regulation, and a separate analysis addresses the incremental costs that may result.

I. PROPOSED REVISIONS AFFECTING THE LISTING PROGRAM

The proposed revisions that alter the listing program in ways that might be thought to affect cost are:

1. Clarifying the definition of "threatened."
2. Codifying the scope of the lists to include waterbodies that are impaired or threatened by atmospheric deposition, and by all combinations of point and nonpoint sources (i.e., point sources only, nonpoint sources only, and a combination of point and nonpoint sources);
3. Expanding the scope of the lists to include waterbodies that are impaired or threatened by pollution (as well as pollutants);
4. Requiring that waterbodies remain listed until standards are attained (rather than only until TMDLs are approved);
5. Changing the format for specifying priorities by requiring that listed waterbodies be grouped into 4 categories (Parts 1 through 4, with TMDLs required for Part 1 waterbodies only), requiring that Part 1 waterbodies be prioritized into three groups (as either high, medium or low priority), and requiring that Part 1 waters with certain characteristics be assigned high priority;
6. Eliminating the requirement that states identify the TMDLs to be completed within 2 years, and replacing it with a requirement for comprehensive, TMDL-specific schedules as part of the listing:
7. Requiring that a State's listing methodology be subject to public review and submitted to EPA by January 31 prior to each submission;
8. Changing the format for a State's required description of its listing methodology; and
9. Changing the date by which lists must be submitted to EPA to October 1 from April 1.

The incremental impact of each of these revisions is discussed below in Sections I.1.–I.9. The combined incremental impact of these revisions is summarized at the conclusion of this chapter.

In addition, the proposed regulations ask for public comment on options for further altering the frequency with which lists must be submitted:

10. Options for altering the listing cycle, ranging from leaving it a 2-year cycle to changing it to a 4-year or 5-year cycle, either effective immediately or subsequent to the next listing due in the year 2000.

The incremental costs (which in this case amount to savings rather than costs) associated with some of these options are evaluated in Section I.10.

Some provisions in the proposed regulations affecting the listing program are not addressed in this chapter because they clearly have no or minimal incremental cost or savings associated with them. These include:

—Revising the definitions of TMDL, wasteload allocation and load allocation, as well as adding definitions for the terms pollution, pollutant, impaired waterbody, thermal discharge, and waterbody. These definitions are intended to clarify meaning rather than to change the substance of the definitions, and do not affect the listing program. To the extent that any of these revisions might affect the cost of developing TMDLs, they are discussed in the next chapter (II. Proposed Revisions Affecting the Development and Content of TMDLs.)

—Requiring a georeference for each listed waterbody does not affect incremental cost because EPA already has a program nearing completion that provides this capability at no cost to the States.

—Additional revisions that do not affect cost include:

—Eliminating the existing regulatory provision that a rationale be provided for any decision not to use some existing and readily available data and information.

—Clarifying that violation of a narrative criterion is a basis for placing a waterbody on the § 303(d) list.

—Clarifying the steps and time frames for actions that EPA will take if the Agency disapproves a State submittal (list or TMDL).

This chapter focuses on the incremental costs or savings that States may realize due to the provisions of the proposed regulations. Chapter IV includes the impact of the proposed regulations on the Agency's workload.

I.1. The definition of "threatened" waterbody is clarified.

Requirement

The proposed regulations clarify "threatened" to mean that adverse declining trends for a waterbody currently meeting water quality standards indicate that standards will be exceeded by the next listing cycle.

Baseline

The existing regulations include the requirement to list threatened waterbodies, but do not define "threatened."

Incremental Cost

The additional costs of this clarification are expected to be minimal for two reasons. First, no additional data or information are needed for States to apply this definition. Second, the time horizon specified in the definition only requires a very near-term focus (one listing cycle), and likely represents the minimum time horizon that States might use to comply with the existing requirement to list threatened waterbodies. Further, this clarification may reduce costs in those cases where States previously interpreted "threatened" to require a longer term assessment, such as projecting a decade ahead.

I.2. The scope of the lists is codified to include waterbodies that are impaired or threatened by atmospheric deposition, and by all combinations of point and nonpoint sources.

Requirement

The proposed rule codifies EPA's existing policy that waterbodies impaired or threatened by atmospheric deposition be listed. The proposed regulations also codify the Agency's long-standing interpretation that the § 303(d) listing requirement applies to waterbodies that are impaired or threatened by any combination of point and nonpoint sources (i.e., point sources only, nonpoint sources only, or a combination of point and nonpoint sources).

Baseline

The proposed regulations arc consistent with the Agency's long-standing interpretation and policy regarding atmospheric deposition and combinations of point and nonpoint sources.

Incremental Impact

No additional costs are anticipated since the proposed regulations do not alter existing requirements.

I.3. Expanding the scope of the lists to include waterbodies that are impaired or threatened by pollution.

Requirement

This proposed revision requires States to use existing and readily available data and information to list waterbodies that are impaired or threatened by "pollution", in contrast to only those impaired or threatened by "pollutants". States are not required to obtain any new data or information to comply with this requirement. The revision adds cases where impairments or threats cannot be linked back to any specific substance or parameter added to the water (i.e., "pollutant", including chemicals, sediment, BOD, bacteria, heat, etc.), such as for flow alterations. Waterbodies that are listed as impaired or threatened by pollution but not pollutants will be listed as Part 2 waterbodies (discussed further below in Section I.5.) and TMDLs are not required for them.

Baseline

Waterbodies impaired or threatened by pollution are already identified as part of the 305(b) reports that States provide. Many States have gone further and include on their 303(d) lists some of their waterbodies that are threatened by pollution. For example, during the 1996 listing cycle, 35 of the States' lists identified at least one water listed because of a pollution cause, and 16 of these States' lists identified many waterbodies listed due to pollution causes. From available information for the 1998 listing cycle for 38 States, at least an additional 6 States have identified pollution causes, of which 4 states identified many causes.

Incremental Cost

EPA does not anticipate that these proposed revisions will significantly increase the resources needed to prepare listings. States have already identified all impaired and threatened waterbodies in their 305(b) reports whether due to pollution or pol-

lutants. Further, States that have already listed many waterbodies that are impaired or threatened by pollution should be only minimally affected by this requirement.

As discussed above, at least 20 States have already listed many waterbodies for such causes. The 36 States that have not listed waterbodies for such causes previously, or who have done so only to a limited extent, may feel it appropriate to hold a public meeting regarding their new policy for listing waterbodies affected by pollution. This public meeting might be in addition to the public participation that already occurs as part of the State's listing process. If needed, this additional public participation effort would only occur once in support of the State's 2000 listing. However, as discussed below in Section I.7., the proposed regulations already require that all States hold an additional public meeting that could be appropriate for this purpose. The additional public participation cost that might be associated with this requirement has been included in the incremental cost estimated in Section I.7. below.

I.4. Waterbodies are listed until standards are attained.

Requirement

Currently, most States list waterbodies until TMDLs are approved, then drop them from their lists. The proposed revision requires that waterbodies remain listed until water quality standards are actually met. This only affects when waterbodies are removed from the list, and does not require the development of any information that wouldn't otherwise be available anyway. These waterbodies will be listed as Part 3 waterbodies, as discussed later in I.5.

Baseline

In most States, a water is removed from the list when all required TMDLs for that water are approved. However, the Agency's current guidance allows waterbodies to remain on a State's list until standards are attained. Some States, such as those in Region 10, have already been following this practice.

Incremental Cost

No additional costs are anticipated as a result of keeping waterbodies listed until standards are attained.

I.5. Waterbodies must be grouped into 4 Parts (1–4), with only Part 1 waterbodies requiring TMDLs and these must have high, medium and low priorities set for them. Part 1 waterbodies with certain characteristics must be classified as high priority.

Requirement

The proposed revision requires that waterbodies be grouped into 4 categories as follows:

Part 1: Waterbodies impaired or threatened by one or more pollutants requiring the development of TMDLs.

Part 2: Waterbodies impaired or threatened by pollution rather than pollutants. A TMDL is not required for waterbodies on this part of the list.

Part 3: Waterbodies for which EPA has approved or established a TMDL, but for which water quality standards have not yet been attained.

Part 4: Waterbodies that are impaired, but for which planned activities other than TMDLs will bring them into attainment. If such a waterbody does not attain water quality standards by the next listing cycle, the waterbody must be included in Part 1.

Only Part 1 waterbodies require TMDLs to be developed and priorities to be established. The proposed regulations further specify that, starting with the 2000 listing, Part 1 waterbodies must be grouped into three classes of priorities: high, medium and low. The proposed regulations specify that high priority Part 1 waterbodies must include all waterbodies for which the designated use is public drinking water supply or that contain or serve as habitat for endangered or threatened species under section 4 of the Endangered Species Act. The definition of medium and low priority is left to the States' discretion. High priority waterbodies must have TMDLs completed for them before low and medium priority waterbodies, and all of the Part 1 waterbodies must have TMDLs completed for them within 15 years of being listed as Part 1—the impact of requiring that TMDLs be developed within these specified time frames is evaluated in chapter III (III. TMIDLs Must Be Completed Within Specific Time Periods).

Part 2 waterbodies were discussed earlier in Section I.3. and Part 3 waterbodies were discussed earlier in Section I.4.

The proposed regulations do not alter the current requirements for Part 4 waterbodies. The proposed regulations do clarify that the time horizon over which attainment must be achieved for these waterbodies is 15 years plus the length of one listing cycle.

Baseline

There is no current requirement to group waters. However, no new data or information is needed for States to group their waterbodies in accordance with the four categories (Parts 1–4) as now specified in the proposed revisions.

With regard to setting priorities, States are already required to set priorities for listed waterbodies under the current program. About 75 percent of the States in their 1996 lists assigned some type of priority to their impaired waterbodies, and an additional 10 percent assigned some type of priority in their 1998 lists. Some States assigned explicit high, medium and low priorities to each water. Some States separated their lists into several tiers (e.g., First, Second, Third) and waterbodies in each tier were assigned the same priorities. Some States actually ranked all their waterbodies or watersheds in numerical priority order. Some States set priorities using a rotating basin approach, planning to develop TMDLs at the same time for all waterbodies located in the same basin. Overall, about 10 of the 56 States used approaches for setting priorities that are essentially equivalent to high, medium and low priorities or that can readily be grouped in this manner.

Incremental Cost

Setting priorities is already a statutory requirement and an ongoing process under the current program. The cost of developing and applying approaches for setting priorities is part of the cost of the existing program, even for States that have not yet developed or applied approaches for setting priorities. Therefore, it is not appropriate to attribute any of the cost of this existing requirement to set priorities to the proposed revisions. The proposed regulations do specify the way that priorities must be set, adding modestly to the cost of setting priorities, as discussed below.

The proposed revisions require a change in the way that waterbodies and priorities are grouped. It is anticipated that the additional effort to group waterbodies into the 4 Parts would be small. Further, it is anticipated that there would not be much additional effort needed to identify the small number of high priority waterbodies (i.e., those for which the designated use is public drinking water supply or that contain or serve as habitat for endangered or threatened species).

States that are not already grouping waterbodies according to high, medium and low priorities may require an additional one-time effort to re-orient their approaches for setting priorities for Part 1 waterbodies. On average, about 100 hours of effort should be adequate for revising an existing priority setting system to meet the requirements of the proposed regulations. Since 10 of 56 States already employ approaches that provide the equivalent of high, medium and low priorities, perhaps 46 listings may require the additional 100 hours of effort to revise their priority setting systems. However, since the 10 states that already have appropriate priority setting systems may still wish to re-evaluate their systems in light of the proposed regulations, we conservatively assume that all 56 states will require, on average, an additional 100 hours of effort. This one-time effort amounts to an additional 5,600 hours (about 2.7 FTE) at $40.37/hour for a total one-time cost of $226,075 to be incurred in 1999. The present value of this cost is $226,075[6] and the annualized cost of this one-time effort through 2015 is $21,641.

In addition, States that are substantially revising their priority setting systems as a result of the proposed regulations might wish to hold an additional one-time public meeting for this revision. This additional public participation has been included within the incremental cost for the new requirement for public participation discussed below in Section I.7.

Finally, it is not anticipated that the proposed regulations will result in additional costs for Part 4 waterbodies. Part 4 waterbodies are cases where States expect attainment of standards without TMDLs.

If a State's expectation for a waterbody proves wrong, the existing regulations would require the development of TMDLs. The proposed regulations' requirement to reclassify Part 4 waterbodies as Part 1 waterbodies if they fail to achieve attainment within one listing cycle only clarifies that there must be a reasonable time ho-

[6] As discussed previously in the methodology section, all costs are discounted to January 1, 1999 and all costs incurred in a year are conservatively assumed to occur at the beginning of the year. Thus, the present value of any costs incurred at any time in 1999 ($226,075 in this case) is the same as the undiscounted cost ($226,075). This is a conservative simplifying assumption because it maximizes the present value of any costs incurred.

rizon for the expectation that standards will be attained. This requirement limits the time horizon to one listing cycle plus 15 years (the time limit for completing TMDLs that are newly listed as Part 1 waterbodies), Thus, a waterbody that is classified as Part 4 in the 2000 listing, must achieve attainment by the next listing—2002 for the current two-year cycle, 2004 if a 4-year cycle is adopted and 2005 if a 5-year cycle is adopted; if the waterbody is not in attainment by then, it must then be classified as a Part 1 waterbody, and therefore it must either achieve attainment or have a TMDL developed for it within 15 years—2017 for the current two-year cycle, 2019 for a 4-year cycle, and 2020 for a 5-year cycle. The time frame that States currently apply when anticipating that waterbodies will achieve attainment without the need for TMDLs should be well within the 17–20 year time horizon as clarified by the proposed regulation.

I.6. A State's list must include a schedule for establishing each TMDL, replacing the existing requirement to target only those TMDLs that will be completed within 2 years.

Requirement

The proposed regulations require that States develop comprehensive schedules for developing TMDLs for all waterbodies included on Part 1 of the list. This requirement would replace the existing requirement to identify only those TMDLs to be developed within two years. Further, the workload for establishing TMDLs must be reasonably paced over the duration of the schedule. As time passes, States may alter the sequence of TMDL development from the original schedule as technical and analytic needs demand. Therefore, the comprehensive schedule commits States more to the overall pace of TMDL development, rather than to a rigid schedule for specific TMDLs.

Baseline

The proposed provision replaces the current requirement that States identify those waterbodies for which TMDLs will be developed over the next two years.

Past and ongoing litigation has and will likely continue to result in States preparing comprehensive schedules for developing TMDLs. 11 States representing about 30 percent of the national total of listed waterbodies have already developed comprehensive schedules as part of Consent Decrees. Plaintiffs have filed litigation for another 15 States, representing 33 percent of the national total of listed waterbodies; and notices of intent to sue have been filed in 5 additional States. Thus, it is likely that, due to current litigation, comprehensive schedules for developing TMDLs would be prepared in the baseline for perhaps half of the States, representing a substantial portion of the TMDLs.

About half of the States use a rotating basin or watershed approach to water quality management, in which States work sequentially through each of their basins on a five year cycle, and schedule all their activities in these basins or watersheds accordingly, including establishing TMDLs.

Incremental Cost

States with Consent Decrees already have comprehensive schedules for developing TMDLs. States that use a rotating basin or watershed approach to water quality management should be able to readily schedule TMDL development in accordance with their existing basin schedule of activities, especially given the flexibility in the regulations regarding the specific sequencing of TMDL development. States without Consent Decrees or States that do no use a rotating basin or watershed approach may require the most planning effort to develop realistic, comprehensive schedules.

For the purpose of estimating incremental cost, we conservatively assume that all 45 States without existing Consent Decrees will need to develop new comprehensive schedules. The task of developing a comprehensive schedule is simplified since all these States will already have developed high, medium and low priorities for Part 1 waterbodies (the incremental cost for this effort was included above in Section I.5.). The task is further simplified because the regulations emphasize primarily the pace of TMDL development rather than the precise sequence (the proposed regulations provide States with the flexibility to alter the sequence of the specific TMDLs that are to be developed). Tbus, it is anticipated that the additional effort needed to develop a comprehensive schedule for each of the 45 States would be, on average, about 20 hours. The total effort for all 45 States for developing the initial comprehensive schedule would amount to 900 hours (.4 FTE) at $40.37/hour for a total cost of $36,333 to be incurred in 2000. However, it is anticipated that the schedule would also need to be reviewed with each listing cycle and revised as needed. These revisions might require perhaps half of the original effort or an average of about 10 hours per listing cycle per State for a total cost of $18,167 in each subsequent

listing cycle. Across all the States, the present value cost of preparing the initial schedule and revising it through 2015 (8½ listing cycles under the existing regulations) would be $108,764 and the annualized cost through 2015 would be $10,411.

I.7. Requiring that the listing methodologies be subject to public review and submitted to EPA by January 31 for each submission.

Requirement

States' listing methodologies must be subject to public review and submitted to EPA eight months prior to the deadline for submission of the list (which the proposed regulations shift from April 1 to October 1 of the listing year as discussed later under Section I.9.).

Baseline

States currently must submit their listing methodologies to EPA for review. The current program requires public participation and review of all aspects of the listing submission, which would include the listing methodology. In compliance with the Paperwork Reduction Act, EPA has periodically prepared Information Requests (ICRs) for the National Water Quality Inventory Reports, which include the estimated burden associated with the TMDL listing process for respondents and for EPA. EPA's current approved ICR (in effect through 2/28/99) estimated the States' effort to conduct public participation for the 303(d) program. For EPA's current ICR, the total State effort for public participation (for the listing program) per listing cycle per State was estimated to be, on average, about 120 hours.

Incremental Cost

The requirement to submit the listing methodology to EPA eight months before submitting the list should not increase the level of effort needed by a State to develop the listing methodology. This requirement may result in the need for some States to shift forward their effort for developing or revising their listing methodology by a few months. Generally, it is not anticipated that the cost of developing the methodologies will be affected by this requirement.

However, separating the public review of the listing methodology from the State's public participation activities regarding the list itself by eight months would likely result in the need for States to increase their public participation effort. This additional effort for public participation would occur for every listing cycle. Further, as discussed previously (in Sections I.3., and I.5.), more extensive public participation would likely be required for the first listing cycle under the proposed regulations to review changes in the listing methodology regarding "pollution" causes, changes in the priority setting approach, and perhaps changes regarding how atmospheric deposition and combinations of point/nonpoint sources are covered. In addition, the proposed regulations emphasize the importance of public participation. Therefore, the resulting increased State effort for public participation is estimated as follows:

—For the first listing cycle under the proposed regulations (i.e., for the year 2000), we anticipate that the additional public participation effort for a State might range from 200–800 hours depending on the level of interest in the State and the extent of the revisions in the listing methodology. This is considered a conservative estimate, given the Agency's current estimate that the on-going State effort for all public participation for the listing program is on average about 120 hours per listing cycle per State. To estimate the national one-time cost for the first listing cycle, we conservatively assume that, on average, the increased level of effort across the 56 States and Territories would be 500 hours per State (i.e., over four times the estimated current average for all public participation activities), for a total increased effort of 28,000 hours or 13.5 FTE for the year 2000 listing cycle.

—For subsequent listing cycles, we anticipate that public participation would likely be more routine in nature and require far less effort than for the first listing cycle under the proposed rules. Nevertheless, to conservatively estimate national cost for subsequent listing cycles (beyond the year 2000), we assume that the average State effort for public participation will nearly double from current levels, with the average level of effort increasing by 100 hours for a total of 5,600 hours or 2.7 FTE per cycle subsequent to the year 2000 listing.

Therefore, the overall incremental cost for the additional State effort for public participation for the first listing cycle (January, 2000) would be $1,130,373 and would drop to $226,075 for subsequent cycles. The present value of this additional cost through 2015 (8½ listing cycles under the existing regulations) would be $1,987,363 and the annualized incremental cost through 2015 would be $190,239.

I.8. New format for the listing methodology.

Requirement

The proposed revision specifies a new format for describing the listing methodology. This new format will not affect the methodology that States use.

Baseline

The current regulations already require that the listing methodology be described. About 69 percent of the 1998 State lists explained their listing methodology (up from 56 percent for the 1996 listing cycle). Because the existing regulations require that the listing methodology be described, the cost of describing the listing methodology is considered to be part of the baseline, regardless of whether a State is currently 20 complying With this requirement.

Incremental Cost

Describing the listing methodology is an on-going requirement of the current program. However, changing the format may result in some additional one-time effort to repackage and clarify the description of the listing methodology in accordance with the new format. An additional one-time effort of 40 hours in the year 2000 should be adequate for adopting the new format. For all 56 listings, the total additional level of effort would be 2,240 hours (1.18 FTE), amounting to a one-time cost of $90,430 assumed to occur in the year 2000. The present value of this cost is $84,514 and the annualized value over the period of analysis is $8,090.

I.9. Changing the listing cycle so that lists must be submitted to EPA on October 1 instead of April 1.

Requirement

The proposed regulations will require States to submit their lists to EPA on October 1 instead of April 1 in each year that lists are due to be submitted.

Baseline

The current regulations require that States submit their § 305(b) water quality reports and § 303(d) lists on April 1 of every even-numbered year.

Incremental Cost

Shifting the due date for listing submissions by six months to October 1 is expected to ease any difficulties that States may have in completing both § 305(b) water quality reports and § 303(d) lists for submission at the same time. This revised due date is not expected to result in increased costs.

I.10. The proposed rule requests comment on options for changing the listing cycle from a 2-year cycle to a 4-year or 5-year cycle, either effective immediately or subsequent to the listing due in the year 2000.

Requirement

The proposed revision asks for comment on options for altering the listing cycle. These options include:

—*Option A*.—Retain the current 2-year listing cycle,

—*Option B*.—Adopt a 4-year or 5-year listing cycle immediately,

—*Option C*.—Require that the first list submission under the new rule occur no later than October 1, 2000, with subsequent list submissions occurring every 4 or every 5 years.

If the listing cycle is lengthened (Option B or C, then fewer lists would need to be prepared and approved in the future, For example, the current listing cycle (Option A) would require 8½ lists to be prepared and approved through 2015, while switching to a 5-year cycle after the 2000 list (Option C) would require 4 lists. From a cost perspective, lengthening the listing cycle would result in savings for, both States and the Agency. Potential savings to States are evaluated in this section, while potential savings to the Agency are evaluated in chapter IV. For simplicity, we have only assessed the savings that States would realize from Option C where a listing is required for October, 2000 and subsequent listings are required every 5 years (instead of every 2 years as currently required).[7]

[7] Generally speaking, the savings associated with a four-year cycle would be somewhat less than for a five year cycle—for Option C, for example, a four-year cycle through 2015 requires effort for 4¾ lists as opposed to the 4 lists needed for a five-year cycle. The savings associated with Option C would be somewhat less than for Option B—for example, for five-year cycles through 2015, Option C requires effort for 4 lists as opposed to the 3⅖ lists needed for Option B.

Baseline

In compliance with the Paperwork Reduction Act, EPA has periodically prepared Information Collection Requests (ICRs) for the National Water Quality Inventory Reports, which include the estimated burden associated percent with the TMDL listing process for respondents and for EPA. EPA's current, approved ICR (in effect through 2/28/99) estimates the current respondents' burden of preparing a 303(d) listing, and is summarized in the following table. Over the time horizon for this analysis (1999–2015), the current program would require 8½ listings. At 25,424 hours per listing cycle, the Agency's total effort through 2015 would be 216,104 hours or 103.9 FTE. These estimates are also the basis for the Agency's submission to renew the existing ICR.

CURRENT STATE LISTING PROGRAM EFFORT PER LISTING AS ESTIMATED IN EPA'S INFORMATION COLLECTION REQUEST

ICR activity number	Description of activity	Effort per State (hours)	Effort all States (hours)
7	Identify waters needing TMDLs	215	12,040
8	Prioritize waters needing TMDLs	118	6,608
9	Conduct 303(d) participation	121	6,776
	Total Hours	454	25,424

When analyzing the impact of Option B or Option C, it would appropriate to include the incremental effort associated with the proposed regulations as part of the baseline. As discussed in previous sections, the proposed regulations will likely result in increasing States' efforts as follows:

INCREMENTAL EFFORT FOR ALL STATES DUE TO THE PROPOSED REGULATIONS PER LISTING AS ESTIMATED IN THIS CHAPTER

Chapter I section number	Description of proposed regulatory revision	Total effort for all States	
		Year 2000 listing (hours)	Subsequent listings (hours)
I.5.	Revise the listing methodology	5,600	.....
I.6.	Develop comprehensive schedules for TMDLs	900	450
I.7.	Provide additional public participation	28,000	5,600
I.8.	Revise the format for the listing methodology	2,240	.....
	Total Hours	36,740	6,050

Thus, over the time horizon for this analysis (1999–2015), the proposed regulations would increase the effort of the current listing program by 36,740 hours for the 2000 listing and by 6,050 hours for each subsequent listing.

The total listing effort for all States per listing cycle for both the current and proposed regulations is summarized in the following table:

TOTAL STATE LISTING PROGRAM EFFORT PER LISTING FOR ALL STATES DUE TO THE CURRENT AND PROPOSED REGULATIONS

Listing year	(Hours—all States)		
	Current program	Increment due to proposed regulations	Total resulting effort
2000 listing	25,424	36,740	62,164

TOTAL STATE LISTING PROGRAM EFFORT PER LISTING FOR ALL STATES DUE TO THE CURRENT AND PROPOSED REGULATIONS—Continued

Listing year	(Hours—all States)		
	Current program	Increment due to proposed regulations	Total resulting effort
Each subsequent listing	25,424	6,050	31,474

Thus, under the current 2-year listing cycle, the States' total listing effort through 2015 would be 62,164 hours for the year 2000 listing and 31,474 for each of the 7½ subsequent listings. The total effort through the year 2015 under the 2-year current listing cycle would amount to 298,219 hours or 143.4 FTE.

Incremental Cost

The current 2-year listing requirement would result in 8½ listings, occurring biennially starting in 2000 and continuing through 2015. As shown above, taking into account the requirements of the proposed regulations, the total effort under the current 2-year listing cycle would be 143.4 FTE.

Option C would lengthen the listing cycle to 5 years, requiring only 4 listings over the same period (i.e., for 2000, 2005, 2010 and 2015). It is not anticipated that a 5-year listing would require more effort than a 2-year listing. In addition, Option C does not affect the effort needed for the 2000 listing. Consequently, the total effort associated with Option C is 62,164 hours for the year 2000 listing and 31,474 for each of the subsequent 3 listings, for a total of 156,586 hours or 75.3 FTE.

Therefore, Option C results in substantial savings compared to the current 2-year listing cycle, as summarized in the following table:

SAVINGS TO STATES ASSOCIATED WITH OPTION C: LENGTHENING THE LISTING CYCLE TO 5 YEARS THROUGH 2015 FOR TWO CASES: (1) THE CURRENT PROGRAM ONLY AND (2) THE NEW PROGRAM

Applicable regulations	Total effort for all States through 2015 (hours—all States)		Savings through 2015—Option C: 5-year cycle over current cycle (hours—all States)
	2-year cycle	Option C: 5-year cycle	
Current Program	216,104	101,696	114,408
Including Proposal	298,219	156,586	141,633

Including the proposed regulations, Option C amounts to a savings over the baseline of 141,633 hours or 68.1 FTE. Furthermore, even with the increased effort that results from the requirements of the proposed regulations, the resulting effort of 156,586 hours is still less than the current effort of 216,104 hours under the existing regulations—this amounts to a savings through 2015 of 59,536 hours or a 27 percent reduction of effort.

The cost associated with the 31,474 hours for each list beyond the year 2000 is $1,270,621. For the current 2-year listing cycle, the present value of completing the 7½ lists from 2002 through 2015 would be $5,232,210. The present value for the Option C listing cycle for the three lists on 2005, 2010 and 2015 would be $1,880,734. Therefore the present value of the savings associated with the 5-year cycle of Option C is $3,351,476 and the annualized incremental savings through 2015 would be $320,818.

I.11. Summary

The costs and savings associated with the proposed revisions discussed in this chapter are summarized in the table on the following page. As shown in the table, the proposed revisions affecting the listing program through 2015 are expected to amount to an annualized cost of about $230,000.

If Option B or Option C for the listing cycle were selected, then a savings would result that would offset some or all of the additional listing program costs of the proposed regulation. Using Option C as an example, switching to a 5-year cycle after

the 2000 listing would save about $320,000 annually, more than offsetting the additional listing program costs of the proposed regulation, and resulting in a net annual savings over this period of about $90,000 per year.

Summary of the Incremental Costs and Savings Associated with the Proposed Revisions to the Listing Requirements

[In thousands of dollars]

Proposed Revision	*Annualized Cost*
I.1. Clarifying the definition of "threatened"	
I.2. Codifying the scope of lists to include waterbodies impaired or threatened by atmospheric deposition & all combinations of point and nonpoint sources	
I.3. Expanding the scope of the lists to include waterbodies impaired or threatened by pollution (as well as pollutants). (Additional public participation cost included in # 7)	
I.4. Requiring that waterbodies remain listed until standards are attained	
I.5. Listed waterbodies must be grouped into 4 Parts, with only Part 1 waterbodies requiring TMDLs. Part 1 waterbodies be prioritized into high, medium and low priorities. (Additional public participation cost is included in 7)	22
I.6. A State's list must include a schedule for establishing each TMDL	10
I.7. Listing methodologies must be subject to public review and submitted to EPA on January 31 before each submission. (Includes public participation cost of 3 & 5)	190
I.8. New format for the listing methodology	8
I.9. Requiring, lists to be submitted October 1 instead of April 1	
Total Annualized Incremental Cost (19,98 $)	230
I.10. Option C: Changing to a 5-year cycle from a 2-year cycle after the 2000 listing	(320)
Total, Annualized Cost (1998 $) Including Option C (Net Savings)	(90)

II. PROPOSED REVISIONS AFFECTING THE DEVELOPMENT & CONTENT OF TMDLS

The proposed revisions affect how TMDLs are to be developed and what must be included, as follows:

1. All TMDLs must include each of the following elements: Waterbody name and geographic location; Target pollutant load; Deviation from the target; Sources, Wasteload allocation and load allocation; Margin of safety; Seasonal variation; Allowance for future growth; and Implementation plan.

2. States must meet minimum requirements for public participation in TMDL development.

These provisions potentially add to the tasks that are typically performed for each TMDL. We estimate the cost of these provisions by: (1) estimating the additional LOE needed to perform each new task for a typical TMDL; (2) converting this LOE into a corresponding cost; and (3) multiplying this unit cost by the projected number of TMDLs for which this task will have to be done.

The incremental impact of each of these revisions is discussed below. The combined incremental impact of these revisions is summarized at the conclusion of this section.

II.1. All TMDLs must include specified elements

Requirement

The proposed regulations require that a TMDL include: (1) identification of the name and geographic location of the waterbody; (2) identification of the pollutant load that may be present and still assure attainment and maintenance of water quality standards (WQS); (3) identification of the amount by which the current pollutant load deviates from this target; (4) identification of the source categories, subcategories and individual sources of the pollutant; (5) WLAs for pollutants from point sources, and LAs for pollutants from nonpoint sources, including atmospheric deposition and natural background; (6) a margin of safety, expressed as unallocated assimilative capacity or conservative analytical assumptions used in calculating the TMDL; (7) seasonal variation such that WQS will be met during all seasons of the year; (8) an allowance for future growth that accounts for reasonably foreseeable increases in pollutant loads; and (9) an implementation plan, including 8 minimum elements described below.

Baseline

Items (1) through (7) in this list of required elements are explicitly required by existing regulations (40 CFR 130.2(i) and 130.7(c)(1)). Item (8) requires a State to reserve an amount for future growth in their allocation strategy that accounts for reasonably foreseeable increases in pollutant loads and explain this decision. This is not currently an explicit requirement for TMDLs, although many TMDLs have included such reserves for future growth. This new requirement is discussed further in section II.1a., below. Item (9), an implementation plan, represents another new requirement that many previous TMDLs have nevertheless included. It is discussed in section II.lb., below.

Incremental Cost

Each of the proposed required elements (1) through (7) represents a reiteration and clarification of existing regulatory requirements and common TMDL practice. As such, these proposed requirements add no incremental costs. The costs of the new requirements, items (8) and (9), are discussed below.

II.1a. All TMDLs must include an allowance for future growth that accounts for reasonably foreseeable increases in pollutant loads

Requirement

The proposed regulations require that a TMDL provide, in the allocation strategy, for foreseeable increases in pollutant loads. The State must document its decision-making process in determining the amount of this allowance for growth, and should explain to stakeholders the implications of the growth allocation decision.

Baseline

In developing TMDLs, States have pursued a variety of approaches with respect to projected future growth in pollution loads:

—In some cases, a portion of the target load is reserved—not allocated to any source or category of sources—for future growth. In these cases, the sum total of the WLAs, the LAs and the margin of safety is less than the target load that will assure attainment and maintenance of WQS.

—In other cases, the full target load is allocated across all sources and categories of sources, but the allocations to such categories as natural background, upstream loadings and air deposition reflect their projected load growth over time. In these cases, the allocations to the remaining sources and categories are sufficiently limited that WQS will be attained and maintained even when the projected future loadings growth from natural background, etc. occurs.

—In other cases, inadequate or no provision is made for growth. Sometimes likely growth in nonpoint source category loads is ignored, too much of the target loading is allocated to point sources, and the WLAs given to point sources eventually prove to be too high when growth in nonpoint source loads occurs.

The first two of these common approaches will be allowable under the proposed regulations, the third will not be. No information is available on the relative frequency with which recent TMDLs have employed one or another of these approaches.

Incremental Cost

The proposed provision requiring an allowance for foreseeable growth will necessitate changed practice only for the portion of TMDLs like the third category. In our view, the requirement to provide for foreseeable growth will result in cost savings for these TMDLs. A TMDL that does not properly account for likely growth will ultimately prove insufficient to attain and maintain WQS when the growth occurs, and the TMDL will need to be redone. Much of the TMDL process will need to be repeated, and the WLAs and/or LAs for some sources or categories will need to be ratcheted down. Sources will need to implement control measures to meet the original WLA or LA, and then to implement additional controls to meet the subsequent, tighter requirements. This two-step process that becomes necessary when growth is not properly accounted for will likely be more costly to both the State and to the sources than it would have been to account for likely growth and get the TMDL right the first time. We are unable to estimate the likely magnitude of this savings.

II.1b. States must develop an implementation plan for each TMDL, including 8 required elements

Requirement

The eight elements required in implementation plans include: (1) a description of the control actions and/or management measures needed to implement the TMDL; (2) a timeline for the implementation activities, including a schedule for revising

NPDES permits, implementation of BMPs, etc.; (3) reasonable assurance that the implementation activities will occur; (4) a description of the legal authorities under which implementation will occur; (5) an estimate of the time required to attain water quality standards; (6) a monitoring plan to determine the effectiveness of the implementation actions; (7) a description of milestones that will be used to measure progress in attaining WQS; and (8) a description of when failure to meet milestones will trigger a revision of the TMDL.

The proposed regulations will allow a State substantial flexibility regarding the scale at which these implementation-related components of a TMDL must be developed. In general, the scale at which an implementation plan is written should match the scale at which the TMDLs have been done. Thus, it may sometimes be appropriate for a State to develop an implementation plan for each particular TMDL for each specific water. Other times, it may be appropriate to develop a broader implementation plan that covers multiple waters in a watershed if all these waters had their TMDLs developed in an aggregated watershed-wide process or if all the waters suffered from similar problems caused by similar sources. In some cases, it might even be appropriate for the State to develop a single broadly applicable State-wide implementation plan if there was substantial similarity in how the State planned to implement the TMDLs in all the State's listed waters of some particular variety.

The proposed requirement that a State provide reasonable assurance that implementation activities will occur merits further explanation. A State must demonstrate with a high degree of confidence that WLAs and LAs will be implemented. For point sources, this means that NPDES permits must be revised consistent with any WLA contained in the TMDL. For nonpoint sources, reasonable assurance can be demonstrated if the planned nonpoint source controls are specific to the pollutant of concern, implemented according to an expeditious schedule, and supported by reliable delivery mechanisms and adequate funding. Examples of reasonable assurance for nonpoint sources might include State regulations or local ordinances, performance bonds, memoranda of understanding, contracts or similar arrangements.

Baseline

These proposed requirements are new in the sense that current regulations do not explicitly require TMDLs to include implementation plans. They are not new, however, in the sense that most of these elements have long been understood to be included in thorough TMDLs, and perhaps roughly ¼ of the TMDLs in fact have included them.[8] Also, all of these elements are currently required to be addressed in State WQM plans, albeit on a more aggregated State-wide or basin-wide basis than would be required by the proposed regulations. In essence, States currently generate most or all of the information needed to prepare TMDL-specific implementation plans, but usually generate such plans at a higher level of aggregation.

With respect specifically to the required demonstration of reasonable assurance, States currently do so for all TMDLs involving point sources, but do not necessarily now do so for TMDLs involving nonpoint sources only. For TMDLs involving nonpoint sources only, the baseline of current State TMDL practice falls somewhat short of the proposed reasonable assurance requirement:

—For TMDLs involving point sources only. States currently demonstrate reasonable assurance regarding WLAs for point sources by providing the schedule by which NPDES permits for the relevant point sources will be revised to incorporate their WLAs. Existing regulations require NPDES permits to incorporate effluent limitations consistent with an applicable TMDL (40 CFR 122.44(d)).

—For TMDLs involving both point and nonpoint sources. EPA's 1991 TMDL program guidance provides that if a point source NPDES permit limit is based on a WLA that relies on nonpoint source load reductions, then the NPDES permit record must include (1) reasonable assurance that the needed nonpoint source controls will be implemented and maintained, or (2) a monitoring program to demonstrate the nonpoint source load reductions. NPDES permits must provide for more stringent limits on the point source if the expected nonpoint source load reductions are not demonstrated. In effect, reasonable assurance for implementation of an entire TMDL involving both point and nonpoint sources is provided by existing, mandatory regulatory controls over point sources.

—For TMDLs involving nonpoint sources only. Current regulations do not require States to have or demonstrate assured controls over nonpoint sources. In prac-

[8] Discussions with a State representative and consultants who have assisted in preparing a great many TMDLs for States suggest that perhaps roughly a quarter of the TMDLs that have been developed recently have included all eight required implementation plan components. This is consistent with the results of a recent review of a sample set of TMDLs received by the Agency, in which ⅓ of the States that submitted TMDLs included "good" implementation plans.

tice, States have a wide variety of workable mechanisms for control of different sorts of nonpoint sources.[9] For probably the majority of nonpoint source TMDL situations that arise, States likely have within this tool kit of mechanisms and authorities some that can provide reasonable assurance. States have developed many TMDLs that do include effective measures to assure achievement of LAs for nonpoint sources. However, the pattern of potential State authorities over nonpoint sources is widely varied, and there are undoubtedly TMDL situations that arise in one or another State where that State does not currently have an assured means of controlling the load from some category of nonpoint sources. For example. State authority to control air deposition to waters, particularly when the sources of the air emissions are dispersed or from other States, is limited. As another example, State mechanisms for control over agricultural nonpoint sources also often do not rise to the level of reasonable assurances.[10]

In short, for TMDLs involving nonpoint sources only, current State practice often falls short of the requirements of the proposed regulations. There are two reasons for this. First, most commonly, States often develop TMDLs without including an Implementation plan. In these cases, the issue of demonstrating reasonable assurance for nonpoint source controls never arises. Second, less commonly, for some nonpoint source TMDL situations, the State does not have an authority or mechanism for a relevant category of nonpoint sources that would be sufficiently effective as to constitute reasonable assurance. The first of these shortcomings relative to the requirements of the proposed regulations would obviously be easier for a State to rectify than the second.

Incremental Cost

For a typical TMDL that does not include an implementation plan, a State representative estimates the average additional LOE necessary to meet the requirements of the proposed regulation as:

—Preparing a monitoring plan—75 to 100 hours; and

—Preparing the remaining eight required elements of an implementation plan—75 to 100 more hours. Some of the remaining eight elements are prepared as a matter of course in developing TMDLs currently, including the description of planned control actions, reasonable assurances for point source controls, and at least a rough timeline, estimate of the time required to attain WQS, and set of milestones. Other elements, such as the required description of the legal authorities under which implementation will occur and reasonable assurance for nonpoint sources can typically be developed easily from existing materials in the State's WQM plan and section 319 plan. Other elements, such as the required description of when failure to meet milestones will trigger a revision of the TMDL, can rely largely on State-wide policy that needs only little tailoring for adaptation to a particular TMDL.

In total, the eight required elements of an implementation plan would add $6,056 to $8,074 (150 to 200 hours at a cost of $40.37 per hour) to the cost of a typical TMDL that did not include them.

In addition, for some sorts of nonpoint source TMDLs in some States, no adequate authorities or mechanisms will exist allowing demonstration of reasonable assurance. In such instances, the State would have a choice between: (1) developing adequate authorities; or (2) developing a TMDL that does not include reasonable assurance and that is therefore not approvable by EPA. For these States, the first course would likely be difficult (the State would presumably need to establish new legal and enforcement authorities or find adequate funding to ensure compliance by the nonpoint sources with their LAs) and the outcome would be unpredictable (the State might not succeed in establishing the new authorities). Under the second course, in the absence of an approvable TMDL from the State, EPA would need to develop the TMDL itself. The proposed regulations include revisions to EPA's NPDES permitting rules that describe how EPA will proceed in such cases where EPA must de-

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[9] See, for example, this summary: Environmental Law Institute. Enforceable State Mechanisms for the Control of Nonpoint Source Water Pollution. October, 1997.

[10] The Environmental Law Institute study cited above observes, for example:

"Agriculture is the most problematic area for enforceable mechanisms. Many laws of general applicability, as noted above, have exceptions for agriculture. Where state laws exist, they often defer to incentives, cost-sharing, and voluntary programs. Nevertheless, about a fifth of the states have some statewide sediment requirements applicable to agriculture, often administered by local governments or soil and water conservation districts. Even more states (about a fourth) authorize individual soil and water conservation districts, as a matter of local option, to adopt enforceable 'land use regulations' for the control of erosion and sedimentation, but most of these require approval by landowner referendum, with approval requiring a super-majority (ranging from 66 to 90 percent) in order for such regulations to become effective."

velop a TMDL because the State cannot provide reasonable assurances for implementation. For cost estimating purposes, we assume the second of these courses. We have no basis for estimating what the costs might be for States to develop the additional authorities necessary so they can provide reasonable assurance for implementation for all nonpoint source TMDLs. Instead, in the portion of the cost analysis addressing the proposed changes to the permitting rules, we estimate the costs for EPA in cases where States have inadequate authorities for reasonable assurance. That analysis is provided in a separate report. Thus, the incremental costs for meeting the reasonable assurance requirements of the proposed regulations are not covered in this chapter.

II.2. States must meet minimum requirements for public participation in TMDL development

Requirement

The proposed regulations require States to provide the public with at least 30 days to comment on TMDLs prior to their submission to EPA. In addition, the State must provide EPA with a written summary and response to public comments.

Baseline

Existing regulations (40 CFR 130.7(c)(1)(ii)) require "that calculations to establish TMDLs shall be subject to public review as defined in the State CPP". EPA has long encouraged States to carry out full public participation in establishing TMDLs consistent with States' administrative procedures requirements. All or nearly all States now routinely provide for public notice and comment and the opportunity for a hearing in their TMDL processes. It is not known how many States develop a written summary and response to public comments.

Incremental Cost

A State representative has estimated that providing for additional public participation consistent with the proposed regulations and beyond that which routinely occurs (i.e., developing a written summary and response to public comments, and increasing the proportion of TMDLs for which a public hearing is held) might require an average of 100 hours (or $4,037 at $40.37 per hour) per TMDL.

II.3. Scaling Up the Cost Estimates From a Single Typical TMDL to All TMDLs

In this section, we have estimated the following incremental costs for a typical TMDL to meet the additional requirements of the proposed regulations:

—7 required elements of a TMDL—No cost
—Allowance for future growth—Savings, not estimated
—Implementation plan—$6,056 to $8,074 (150 to 200 hours)
—Reasonable assurance (some nonpoint source TMDLs)—EPA's cost is estimated in the permit rule analysis
—Additional public participation—$4,037 (100 hours)

These costs represent unit costs that must be scaled up by the number of TMDLs for which these additional elements will need to be developed.

In the Methodology section, we estimate that 20,000–40,000 TMDLs will need to be developed during the period of analysis. If we assume that implementation plans sufficient to meet the proposed new requirements are routinely developed now for about one quarter of all TMDLs and that this baseline practice will continue in the future, three quarters of all future TMDLs (roughly 15,000–30,000 of them) will face incremental costs for implementation plans under the proposed regulations. The estimated additional costs for enhanced public participation will apply to all 20,000–40,000 future TMDLs.

To the extent that the required implementation plan and public participation requirements are met on an aggregated watershed basis rather than individually for each TMDL, the number of instances in which these additional activities will need to occur will be less than shown above. We have no adequate basis for estimating the likely extent to which such geographic aggregation will occur and reduce the incremental workload. To be conservative, we will assume no geographic aggregation. We assume that the additional workload for implementation plans will be necessary for three quarters of all TMDLs (15,000 to 30,000 of them), and the additional workload for enhanced public participation will be necessary for all TMDLs (20,000 to 40,000 of them).

Multiplying these numbers of TMDLs needing additional work by the added cost for a typical TMDL and annualizing over the 17-year period of analysis, we estimate the cost of the proposed new requirements to be $10.1–$23.8 million per year.

II.4. Summary

The costs of the proposed revisions discussed in this chapter are summarized below:

Summary of the Incremental Costs Associated with the Proposed Revisions Affecting the Content of TMDLs

[In millions of dollars]

Proposed revision	*Annualized cost*
TMDLs must include 9 elements:	
7 elements	.....
Allowance for future growth	(1)
Implementation plan	5.3–14.3
.....	
(Reasonable assurances)	(2)
Minimum required public participation in TMDL development	4.8–9.5
Total	10.1–23.8

[1] Savings.
[2] Estimated elsewhere.

TMDLS MUST BE COMPLETED WITHIN SPECIFIC TIME PERIODS

As discussed previously in chapter I, the proposed regulations require that TMDLs be developed for Part 1 waterbodies and that States must determine the priority of these TMDLs as either high, medium or low priority. All Part 1 waterbodies must have TMDLs completed for them within 15 years as described below:

—TMDLs for high priority Part 1 waterbodies must be completed before low and medium priority waterbodies. When feasible, EPA encourages States to adopt a goal of completing the development of TMDLs for high priority waterbodies within 5 years. However, EPA recognizes that a 5-year time frame may not be feasible for all States.

—TMDLs for all Part 1 waterbodies must be completed within 15 years of being listed as Part 1 waterbodies. Thus, for example, waterbodies that are newly listed Part 1 waterbodies in the year 2000 must have completed TMDLs by 2015; similarly, TMDLs for waterbodies that are newly listed, for example, in 2010 must be completed by 2025.

Requiring that TMDLs for Part 1 waterbodies be developed within specific time periods might result in the acceleration of the development of some of these TMDLs relative to the pace that might have occurred in the baseline. Accelerating the development of a TMDL results in its cost of development being incurred sooner, and therefore increases the present value cost of TMDL development.

The potential cost impacts of accelerating the development of TMDLs that might have otherwise taken longer than required by the proposed regulations are estimated in this chapter for the following proposed requirements:

—Requiring that TMDLs for high priority Part 1 waterbodies be developed first, and requiring that high priority waterbodies include all those for which the designated use is public drinking water supply or that contain or serve as habitat for endangered or threatened species.

—Requiring that TMDLs for all Part 1 waterbodies, regardless of priority, be developed within 15 years of listing as Part 1.

The incremental costs of these requirements due to resulting changes in the listing process were covered in chapter I.

II.1. TMDLs for high priority Part 1 waterbodies must be developed first.

Requirement

The proposed regulations require that States identify all Part 1 waterbodies for which the designated use is public drinking water supply or that contain or serve as habitat for endangered or threatened species under section 4 of the Endangered Species Act. These must be classified as high priority, and TMDLs for these waterbodies must be completed first. States are encouraged to adopt a goal of completing TMDLs for high priority waterbodies within 5 years of being listed as a Part 1 waterbody.

Baseline

As discussed further in section III.2. below, nearly all States have committed to completing TMDLs for all of their Part 1 waterbodies within 15 years. Of these States, 21 States have committed to schedules of 10 years or less. To accomplish

any of these schedules, substantial portions of the States' TMDL workload would need to be completed within the first five to ten years in the baseline.

Incremental Cost

It is not anticipated that this proposed requirement will result in incremental costs to the States for several reasons.

—To the extent that States have waterbodies for which the designated use is public drinking water supply or that contain or serve as habitat for endangered or threatened species, the Agency believes that States would have scheduled prompt development of TMDLs for these waterbodies in the baseline anyway.

—The proposed regulation allows waterbodies which have endangered species present to be assigned a medium or low priority if the State has an approved Habitat Conservation Plan or other specific, enforceable mechanism developed in accordance with the Endangered Species Act.[11]

—The goal of completing TMDLs for high priority waters within 5 years will likely be feasible for many States. Given the States' current commitments to complete their TMDLs within the next 10–15 years, States will generally be developing an appreciable fraction (perhaps ¼–⅓) of their TMDLs within the next five years anyway. Therefore, it should not be difficult for many States to sequence TMDL development schedules to ensure that TMDLs for high priority waters be developed first, and completed within 5 years. EPA recognizes that this time frame may not be feasible for all States. Therefore, the 5-year completion time frame is only a goal, not a requirement.

Thus, the proposed regulations' requirement to complete TMDLs for high priority waterbodies first will not result in increased costs because the Agency believes that TMDLs for these waterbodies would likely have been scheduled for priority development by States anyway in the baseline; and if not, overall TMDL development schedules could readily be re-sequenced within the States' current commitments in the 1998 listing program to address the high priority TMDLs first. Finally, the goal of completing TMDLs for high priority waters within 5 years is a goal, not a requirement.

III.2. All Part 1 waterbodies must have TMDLs completed for them within 15 years.

Requirement

The proposed regulations require that TMDLs for all priority Part 1 waterbodies be developed within 15 years. This schedule will be required for all Part 1 waterbodies starting with the 2000 listing—TMDLs for these waterbodies must be completed by 2015. Waterbodies listed in 1998 actually have a 17-year maximum schedule, since the 15-year time-limit does not apply until the 2000 listing. In listings subsequent to 2000, TMDLs for newly listed Part 1 waterbodies will need to be completed within 15 years from their listing date. The following calculations focus on the cost of this requirement for the TMDLs that will need to be completed within the 17 years through 2015.

Baseline

Most States have already committed to completing TMDLs for their currently listed waterbodies prior to 2015—i.e., they will not be affected by the proposed revision. Based on EPA's December 11, 1998 "Status of 1998 303(d) Lists," 48 States have committed to schedules and sent them to EPA. Schedules are anticipated soon for the remaining 8 States. Draft schedules are available for 5 of these States. Therefore, at this point, we have a basis for estimating the TMDL completion schedules for 53 States, which represent 95 percent of the listed waterbodies. Over the next few months, the remaining 3 States will submit their schedules, eliminating the need for any assumptions regarding their schedules.

For the 53 States (having draft schedules or final schedules), commitments for completing TMDLs for their 1998 listed waterbodies range from 3 years to 20 years (i.e., completion by 2001 to 2018). Only two of these States have scheduled TMDLs to be completed past 2015: Missouri and New Mexico. However, New Mexico's Consent Decree specifically allows it to develop TMDLs for its 1996 listed waterbodies through 2018, and therefore New Mexico is not subject to the 15-year requirement of the proposed revision. Missouri has listed about 77 waterbodies. Assuming that Missouri will develop TMDLs uniformly through 2018, then TMDLs for about 12 waterbodies are currently scheduled to be developed past 2015.

It is more difficult to determine the baseline for the remaining 3 States whose schedules are still pending. Therefore, we provide a range of possibilities. Based on

[11] This regulation, however, does not require consultation with the U.S. Fish and Wildlife Service.

the schedules for the 53 States, it would be reasonable to anticipate that all of the TMDLs for 1998 listed waterbodies for the remaining 3 States will be completed by 2015. This assumption provides the basis for our "low" estimate. To provide a "high" estimate we assumed that all of the remaining 3 States will complete their TMDLs by 2020 instead of by 2015, exceeding by two years the longest of any of the State schedules that have been submitted. This is a very conservative assumption since only 2 of the 53 States with schedules extend to even 2018. Assuming that these 3 States develop TMDLs uniformly through 2020, then under the "high" estimate, TMDLs for an additional 249 waterbodies are scheduled to be developed past 2015.

Thus, given current State commitments, at least 52 States will not be affected by the proposed revision requiring that TMDLs be developed by 2015 (51 States with current or expected schedules prior to 2015, and New Mexico). 1–4 States may need to accelerate the development of TMDLs for as many as 12–249 1998-1isted waterbodies. This range should narrow over the next few months as States submit their schedules for developing TMDLs. The details of this baseline analysis of TMDL development are shown in Attachment 1, which provides State-by-State schedules and projected year-by-year TMDL development by State past 2015.

As discussed in the Methodology section, it is important to note that the number of listed waterbodies requiring TMDLs is only an indication of the number of waters needing TMDLs, not the actual number of TMDLs that will be done.

—To some extent, the number of 1998 listed waterbodies can overstate the number of waterbodies that will require TMDLs, because not all 1998-1isted waterbodies will be considered to be Part 1 waterbodies. In the 2000 listing, some of these waterbodies will be classified as Part 2 waterbodies (which do not require TMDLs because they are not impaired due to pollutants), some will be classified as Part 3 waterbodies (for which a TMDL has been completed) and some will be classified as Part 4 waterbodies (which do not require TMDLs because other measures will address the problems). Therefore, since the 12–249 estimate of waterbodies for which TMDLs that might be developed past 2015 assumed that all 1998-listed waterbodies would be Part 1 waterbodies, it is likely that this estimate is overstated.

—On the other hand, most listed waterbodies have more than one cause of impairment and a TMDL may be needed to address each cause. For the 1996 listings there were slightly more than twice as many causes as waterbodies, and for the 1998 listings there were slightly less than twice as many causes as waterbodies. If each cause requires a TMDL, then about twice as many TMDLs would be required as waterbodies. However, TMDLs that handle multiple causes can be developed.

For this analysis, we have assumed that the number of TMDLs to be completed ranges from the number of listed waterbodies to twice this number of waterbodies. Thus, the number of TMDLs that in the baseline would be developed past 2015 would range from 12 to 499:[12]

—The low end of the range (12 TMDLs) assumes that all 3 States without schedules submitted yet will choose schedules completing TMDLs for their listed waterbodies prior to 2015. The low end of the range also assumes that the number of 1998 listed waterbodies likely significantly overstates the number that will eventually be categorized as Part 1. This also assumes that multiple causes for a listed water will not commonly necessitate multiple TMDLs for that water.

—The high end of the range (499 TMDLs) assumes that all 3 States will submit schedules that reflect even longer time frames than those that have been submitted to date (i.e., completion by 2020). It also assumes that separate TMDLs will generally be needed to address every cause.

This broad range provides the basis for analyzing the incremental cost of the acceleration of TMDL development caused by the proposed rule's requirement that TMDLs must be completed within 15 years after a water is listed.

Incremental Cost

In the absence of the proposed rule, we assume that approximately 12–499 TMDLs would be developed (we assume at a steady rate) between 2016 and 2020. As a result of the proposed rule, the development of these TMDLs will need to be accelerated, and we assume they will be rescheduled to be developed at a steady rate between 1999 and 2015. The incremental cost of accelerating the development of these TMDLs is the time-value of incurring these expenditures sooner. This is just the difference between the present value of completing the TMDLs under the

[12] From Attachment 1, the low end is 11.6 waterbodies rounded up to 12, and the high end is $249.3 \times 2 = 498.6$ rounded up to 499.

baseline schedule versus the present value of completing the TMDLs under the new schedule required by the proposed rule.

Thus far, we have estimated the number of TMDLs and their alternate schedules. The remaining key element that is needed is the average cost of developing these TMDLs. Studies estimating the cost of TMDL development have shown a wide range of potential cost. For example, one study[13] examined fourteen TMDL case studies in which the costs ranged from about $4,000 to $1,000,000. The costs for six of the TMDLs were under $22,000 and the costs for the remaining eight were over $145,000. The cost for a given TMDL can depend on a wide range of factors including the watershed size, the complexity of the analytic work needed, the number and type of pollutants addressed, and the level of public interest. There are reasons to expect that the average cost to develop a TMDL will be at the lower end of the range found in this study, and that the average cost will decline over time:

—The cost depends on the extent to which TMDLs for similar circumstances have been developed and on the extent of the State's experience in developing TMDLs. The first TMDLs to be developed tend to be the most costly because staff is less experienced and many technical issues will be addressed for the first time. As more TMDLs are completed, staff will become more experienced and the work routine, so that the cost of developing TMDLs will tend to decline.

—Recent experience has shown that once a "template" is created for developing TMDLs for a pollutant, that approach can often be applied to other waterbodies at a relatively low cost.

—The technology for developing TDMLs has steadily improved over the years and its cost has declined.

—As States increasingly adopt a watershed approach, some costs, such as for public participation, can decrease dramatically on a per/TMDL basis. For example, a single public participation process at the watershed level, costing, say, $50,000, might serve to take the place of similar efforts for perhaps ten TMDLs, resulting in a cost of $5,000 per TMDL.

Thus, while the cost of developing a specific TMDL might be at the higher end of the range, the average cost of developing TMDLs across the program is expected to be at the lower end of the range.

For this report, the average cost of developing a TMDL is assumed to be $25,000. This includes the increased costs that were identified in chapter II of this report as likely to result from the proposed regulations. Note that the cost estimates for accelerating the development of TMDLs depend directly on this assumption: if the assumed average cost of developing a TMDL were increased to $50,000 the estimated incremental cost of accelerating TMDL development would double; if the assumed average cost of developing a TMDL were decreased to $12,500, the estimated incremental cost of accelerating TMDL development would decline by 50 percent.

The detailed calculations for the cost of accelerating the development of 12–499 TMDLs so that they are completed by 2015 are shown in Attachment 2—Attachment 2 shows the step-by-step calculations that use the specific TMDL development patterns derived in Attachment 1. The results are summarized below:

—*Low estimate*.—The total cost of developing the 12 TMDLs over the period 2016–2020 is about $300,000 and its 1999 present value is about $85,000. Developing these 12 TMDLs over 1999–2015 has the same total cost, but a 1999 present value of about $175,000. Thus, the incremental cost of accelerating the development of these 12 TMDLs is about $90,000. The annual cost of acceleration as annualized over 1999–2015 is about $9,000.

—*High estimate*.—The total cost of developing 499 TMDLs over the period 2016–2020 is about $12.5 million and its 1999 present value is about $3.5 million. Developing these 499 TMDLs over 1999–2015 has the same total cost but a 1999 present value of about $7.7 million. Thus, the incremental cost of accelerating the development of these 499 TMDLs is about $4.2 million. The annual cost of acceleration as annualized over 1999–2015 is about $400,000.

In summary, given the assumptions made in this report, accelerating the development of 12–499 TMDLs from the period 2016–2020 to the period 1999–2015 results in an increased annualized cost ranging from about $9,000 to about $400,000 through 2015.[14]

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[13] EPA, TMDL Development Cost Estimates: Case Studies of 14 TMDLs. EPA–R–96–001, May 1996.

[14] Note that the incremental cost of accelerating TMDL development from the period 2016–2020 to the period 1999–2015 roughly results in doubling the cost of TMDL development. For example, for the low estimate of 12 TMDLs, the 1999 present value cost is roughly doubled from about $85,000 to about $175,000, for an incremental cost of about $90,500. This is not sur-

Continued

IV. INCREASED COSTS FOR EPA RESULTING FROM THE PROPOSED REGULATIONS

The proposed regulations alter the requirements for States for the listing program and for the content and development of TMDLs. These requirements have implications for the Agency as well:

—1. Proposed revisions to the listing program and for the content of TMDLs will also result in increased costs to EPA for reviewing and approving lists and TMDLs.

—2. Options for reduced frequency with which lists must be submitted will reduce the number of State lists EPA must review and approve and thereby reduce cost to EPA.

—3. The suggestion that the public petition EPA for action to establish TMDLs rather than proceed directly to litigation will likely reduce costs for both EPA and the public.

Each of these proposed requirements is evaluated in this chapter.

This report does not evaluate the incremental costs to EPA in cases where EPA must develop portions of a TMDL if a State cannot provide reasonable assurance for implementation of the TMDL. The specific procedures for this are included in the proposed revisions to the Agency's permitting regulation, and a separate analysis addresses the incremental costs that may result.

IV.1. Proposed revisions to the listing program and for the content of TMDLs will also result in increased costs for EPA for reviewing and approving lists and TMDLs.

Requirement

EPA's new requirements under the proposed revisions (as described in chapters I, II and III) will result in changes in the content of list submissions as well as of TMDLs.

Baseline

The Agency's current activities regarding the listing program and for reviewing/approving lists are identified in the Agency's current approved Information Collection Request (in effect for the three year period ending 2/28/99). The Agency is in the process of renewing the ICR for the next period (ending 2/28/01) and has developed new estimates for the Agency burden associated with these activities. The estimates for the current ICR and its proposed renewal are shown in the following table.

The Agency has estimated that its burden will increase significantly over the next three years, primarily due to the increased pace for developing TMDLs that States have committed to in their 1998 lists. This increase in the expected Agency burden is part of the baseline—as detailed in chapter III, States have already committed in their 1998 list submissions (in the baseline) to increasing the pace of TMDL development, and the State schedules are consistent with the requirements of the proposed regulation for nearly all of the States. This factor accounts for the bulk of the expected increase in the Agency's effort as anticipated in the ICF, amounting to 5,580 hours (out of the total increase 6,032 hours). This expected increase also includes consideration of any increased effort that might be associated with the proposed regulation's new requirements for the content of TMDLs.

COMPARISON OF EPA'S CURRENT AND EXPECTED BURDEN FOR ACTIVITIES IDENTIFIED IN ITS INFORMATION COLLECTION REQUESTS FOR THE 303(D) PROGRAM

Description of activity and number	Frequency (years)	ICR burden estimate (annual hours)	
		Existing (to 3/99)	Renewal (to 3/01)
8. Prepare 303(d) guidance	1	62	62
9. Provide technical assistance to States for 303(d)	1	96	236

prising, since on average, TMDL development is accelerated from about 2018 (the midpoint of the baseline period) to about 2007 (the midpoint of the accelerated development period), an average acceleration of about 11 years. At 7 percent annually, time-value doubles in ten years and increases to 210 percent in eleven years. Conversely, delaying TMDL development by 10 years halves its cost.

COMPARISON OF EPA'S CURRENT AND EXPECTED BURDEN FOR ACTIVITIES IDENTIFIED IN ITS INFORMATION COLLECTION REQUESTS FOR THE 303(D) PROGRAM—Continued

Description of activity and number	Frequency (years)	ICR burden estimate (annual hours)	
		Existing (to 3/99)	Renewal (to 3/01)
10. Review draft 303(d) lists	2	96	236
11. Send TMDL approval/disapproval notices to States	1	20	5,600
12. Review final 303(d) lists. Negotiate to resolve disapprovals	2	328	500
Total Annual Agency Burden	.....	602	6,634
Expected Increase in Total Annual Agency Burden	.....	.....	6,032

Increment

The new estimates for the Agency's effort for 303(d) activities also take into account the provisions of the proposed regulation for the listing program. As shown in the following table, the Agency anticipates that its activities for preparing 303(d) guidance, providing technical assistance to States, reviewing draft lists, and reviewing final lists and negotiating to resolve disapprovals will increase by 452 hours annually—an increase of nearly 80 percent. At the average loaded hourly rate of $40.37/hour used in the ICR to estimate the cost of the Federal burden, the increased effort is estimated to cost $18,247 annually.

IV.2. Options for altering the listing cycle will affect EPA's workload by changing the number of lists EPA must evaluate.

Requirement

As discussed in Chapter I, the proposed revision asks for comment on options for the listing cycle. These options include:

—Option A—Retain the current 2-year listing cycle,

—Option B—Adopt a 4-year or 5-year listing cycle immediately,

—Option C—The first list submission under the new rule would occur no later than October 1, 2000, with subsequent list submissions occurring every 4 or every 5 years.

As shown in Chapter I, using Option C as an example, lengthening the listing cycle would result in savings for States because fewer lists would need to be prepared. This assessment of the corresponding savings to the Agency also focuses on Option C, where a listing is still required for October, 2000 and subsequent listings are required every 5 years.

Baseline

The current listing cycle requires the submission of lists every 2 years.

Incremental Cost

Altering the listing cycle would not be expected to affect the annual burden for EPA's activities for preparing 303(d) guidance, providing technical support to States, or sending TMDL approval/disapproval notices to States. Altering the listing cycle would affect the Agency's annual effort for reviewing draft and final 303(d) lists and negotiating to resolve disapprovals. The Agency's total effort for these activities for a list submission is 1,472 hours. Switching from the current 2-year cycle to a 5-year cycle would lower the Agency's annual effort from 736 hours to 295 hours annually, for a savings of 441 hours annually as shown in the following table.

COMPARISON OF EPA'S BURDEN FOR 303(D) PROGRAM ACTIVITIES FOR THE CURRENT 2-YEAR CYCLE VERSUS A 5-YEAR CYCLE

Description of activity and number	Current frequency (years)	ICR burden estimate (annual hours)	
		2-year cycle	5-year cycle
10. Review draft 303(d) Lists	2	236	95
12. Review final 303(d) lists. Negotiate to resolve disapprovals	2	500	200
Total Annual Agency Burden	.....	736	295
Expected Decrease in Total Annual Agency Burden	.....	.....	441

This savings of 441 hours annually would essentially offset the increased annual burden of 452 hours identified in the previous section. The value of the undiscounted savings is $17,803. However, since the bulk of these savings would be realized after the year 2000, the actual savings is slightly less as explained below.

Putting it another way, the current 2-year cycle through the year 2015 would require the Agency to provide 1,472 hours for 8½ listing cycles for a total effort of 12,512 hours. Option C, which maintains the 2000 listing but requires only an additional 3 listings through 2015 would result in a burden of 5,888 hours. Thus, switching from a 2-year to a 5-year cycle would save the Agency 6,624 hours after the 2000 listing through the year 2015. Taking into account the pattern of savings through 2015, the present value of the savings would be $156,744 and the annualized savings over this period would be $15,004.

IV.3. The proposed regulations suggest that the public petition EPA for action to establish TMDLs rather than proceed directly to litigation.

Requirement

The proposed regulation clarifies that the public must petition EPA prior to filing a lawsuit seeking to compel EPA to carry out TMDL program actions that States are directed to perform. The petition requirement applies only to discretionary EPA actions under CWA Section 303(d). The petition requirement does not apply to non-discretionary EPA actions under Section 303(d) (i.e., to approve or disapprove a TMDL or list after it is submitted by a State, or to establish a TMDL or list if EPA disapproves a State's submission). For non-discretionary EPA actions, no petition is necessary and a party seeking to compel EPA action may proceed directly to litigation.

The petition requirement will apply to discretionary EPA actions such as establishing TMDLs for a State in the alleged absence of State TMDL activity. Several groups objecting to what they view as slow State progress on TMDLs have filed lawsuits to compel EPA to step in and develop TMDLs or lists for a State. In such cases, EPA feels that litigation is premature because the Agency has not yet made a final decision whether or not to establish TMDLs or lists in place of the State. Absent a final Agency decision, EPA believes that courts lack a factual record to evaluate. If instead a party petitions EPA to take the desired discretionary action, EPA's response to the petition will constitute final Agency action and the record established by the Agency in responding to the petition will provide a record that is reviewable by courts in any subsequent litigation.

Baseline

Groups dissatisfied with State progress on TMDLs or lists have filed more than 40 cases involving about 34 States. High costs have been incurred by all litigants: plaintiffs in preparing and arguing the cases, and States and EPA in defending and settling them. EPA believes that petitions filed under the Administrative Procedures Act provide an opportunity to resolve many TMDL program issues in a less costly manner, without litigation.

Incremental Cost

EPA believes that compliance with this requirement will reduce costs for both the Agency and the public. Preparing and filing petitions will cost the public far less than preparing and filing lawsuits, and it is far less resource-intensive for the Agency to respond to petitions than to lawsuits. The Agency believes that many issues can be resolved through the petition process, avoiding litigation and the unneces-

sary expenses that all parties would otherwise incur. To the extent that petitions do not avoid lawsuits, the Agency believes that most of the effort to prepare and respond to petitions would have occurred anyway as part of the litigation process. The Agency acknowledges the possibility that the low cost of preparing petitions might result in more petitions being filed by parties that otherwise would have been deterred by the cost of litigation. Nevertheless, on balance, the Agency believes that compliance with this existing requirement would benefit all parties, and reduce the overall cost that otherwise would be incurred.

V. IMPACT ON THE AGENCY'S INFORMATION COLLECTION REQUEST

The Agency is proposing a revised Information Collection Request for certain activities under the 303(d) program to replace the existing 3-year ICR which expires on 3/1/99. As discussed in chapters I and IV, the Agency's ICR estimates the burden for States' preparation of 303(d) lists, and for the Agency's activities regarding the listing program as well as for reviewing and approving TMDLs. This chapter summarizes the information developed earlier in this report regarding the extent to which the proposed regulation affects the burden of both the States and the Agency for those activities identified in the proposed ICR, which covers the period from 3/1/99 to 2/28/01.

Estimated Change In State Burden

The next ICR will encompass the next listing which is currently due in the year 2000. As discussed extensively in chapter I, the proposed regulation increases the total State effort for the year 2000 listing by 36,740 hours. As estimated in the ICR, at a cost of $40.37 per hour, this amounts to a total cost increase of nearly $1.5 million for the period.

Since the next ICR covers the period ending 2/28/01, a portion of the increased effort for the next listing after the year 2000 listing should also be considered. However, this additional burden depends on whether the current 2-year listing cycle is continued, or whether a 4 or 5-year listing cycle is adopted instead:

—If the current 2-year listing cycle continues then half of the 2002 cycle would need to be included in the ICR as well. As discussed in chapter I, the proposed regulations increase the total State effort for listings subsequent to the year 2000 listing by 6,050 hours. If half of this effort occurs in 2001, then the proposed regulations increase the burden in the ICR by 3,025 hours or about $122,000.

—If a 4 or 5-year listing cycle were adopted it does not seem likely that those activities that account for the increased burden due to the proposed regulations would take place as early as 2001. Therefore, an additional adjustment for an increased burden associated with the next cycle would be unnecessary.

Therefore, the total adjustments to the respondent burden as estimated in the Agency's ICR for the period ending 2/28/01 for the 303(d) program range from an additional 36,740 hours at $1.5 million if the listing cycle is lengthened, to 39,765 hours at $1.6 million if the current 2-year listing cycle is maintained.

However, for future ICRs, as discussed in chapter I, if the listing cycle is lengthened, savings that result from avoiding future listing cycles (i.e., under Option C, States would only be required to submit 4 lists instead of 8½ lists through 2015) would more than cover the increased burden to States that results in the near term from the proposed regulations. As summarized at the end of chapter I, through the year 2015, the proposed regulations would increase the States' annualized costs by $230,000 but this would be more than offset by the $320,000 annually that States would save if the listing cycle were lengthened. The net annualized savings would be about $90,000 per year.

Estimated Change in Agency Burden.

As discussed in chapter IV, EPA's estimates of its ICR burden for the period ending 2/28/01 for, the 303(d) program already include consideration of both:

—1. Increases in the States' baseline level of activity which results in an increased annual burden for the Agency of 5,580 hours, and

—2. Increases in Agency activity that might result from the proposed regulations, amounting to an additional annual burden of 452 hours or $18,247.

Altogether, the Agency has proposed to increase its burden estimate in the proposed ICR by a factor of 11 from the current ICF, representing an increase in burden from 602 hours annually to a total of 6,634 hours annually. Since the Agency's estimates already reflect expected changes in burden, no additional revisions to the estimates for the Agency's burden are needed to further reflect the proposed regulations.

However, as noted in chapter IV, if the listing cycle were lengthened, then the Agency would realize savings that would offset the increased burden associated with the proposed rule.

ATTACHMENTS 1 & 2 (WORKSHEETS FOR CHAPTER III)

CURRENTLY LISTED WATERS SCHEDULED FOR TMDL DEVELOPMENT AFTER 2015 [1]

EPA region & State	Number listed waters	Schedule		Current commitments after 2015 [2]					
		Years	End year	2016	2017	2018	2019	2020	Total
I. Connecticut	134	12	2010	.....	.....	.....	.....	.....	.....
Maine	257	13	2011	.....	.....	.....	.....	.....	.....
Massachusetts	[3] 1,000	15	2013	.....	.....	.....	.....	.....	.....
New Hampshire	171	12	2010	.....	.....	.....	.....	.....	.....
Rhode Island	[3] 100	12	2010	.....	.....	.....	.....	.....	.....
Vermont	[3] 200	[4] 15	2013	.....	.....	.....	.....	.....	.....
II. New Jersey	1,048	9	2007	.....	.....	.....	.....	.....	.....
New York	576	11	2009	.....	.....	.....	.....	.....	.....
Puerto Rico	[3] 140	6	2004	.....	.....	.....	.....	.....	.....
U.S. Virgin Islands	9	13	2011	.....	.....	.....	.....	.....	.....
III. Delaware	174	13	2011	.....	.....	.....	.....	.....	.....
DC	[3] 38	12	2010	.....	.....	.....	.....	.....	.....
Maryland	197	10	2008	.....	.....	.....	.....	.....	.....
Pennsylvania	1,035	3	2001	.....	.....	.....	.....	.....	.....
Virginia	[3] 939	12	2010	.....	.....	.....	.....	.....	.....
West Virginia	696	10	2008	.....	.....	.....	.....	.....	.....
IV. Alabama	114	7	2005	.....	.....	.....	.....	.....	.....
Florida	712	16	2014	.....	.....	.....	.....	.....	.....
Georgia	571	7	2005	.....	.....	.....	.....	.....	.....
Kentucky	231	13	2011	.....	.....	.....	.....	.....	.....
Mississippi	[3] 700	[4] 10	2008	.....	.....	.....	.....	.....	.....
North Carolina	477	10	2008	.....	.....	.....	.....	.....	.....
South Carolina	658	12	2010	.....	.....	.....	.....	.....	.....
Tennessee	351	11	2009	.....	.....	.....	.....	.....	.....
V. Illinois	738	15	2013	.....	.....	.....	.....	.....	.....
Indiana	153	[5] 22	2020	7.0	7.0	7.0	7.0	7.0	34.8
Michigan	312	[5] 13	2011	.....	.....	.....	.....	.....	.....
Minnesota	155	13	2011	.....	.....	.....	.....	.....	.....
Ohio	839	[5] 22	2020	38.1	38.1	38.1	38.1	38.1	190.7
Wisconsin	541	[4] 13	2011	.....	.....	.....	.....	.....	.....
VI. Arkansas	52	14	2012	.....	.....	.....	.....	.....	.....
Louisiana	195	12	2010	.....	.....	.....	.....	.....	.....
New Mexico	189	[6] 20	2018	.....	.....	.....	.....	.....	.....
Oklahoma	533	13	2011	.....	.....	.....	.....	.....	.....
Texas	147	10	2008	.....	.....	.....	.....	.....	.....
VII. Iowa	54	[5] 22	2020	2.5	2.5	2.5	2.5	2.5	12.3
Kansas	[3] 771	8	2006	.....	.....	.....	.....	.....	.....
Missouri	[3] 77	20	2018	3.9	3.9	3.9	.....	.....	11.6
Nebraska	[3] 112	10	2008	.....	.....	.....	.....	.....	.....
VIII. Colorado	85	12	2010	.....	.....	.....	.....	.....	.....
Montana	877	10	2080	.....	.....	.....	.....	.....	.....
North Dakota	133	13	2011	.....	.....	.....	.....	.....	.....
South Dakota	171	13	2011	.....	.....	.....	.....	.....	.....
Utah	205	12	2010	.....	.....	.....	.....	.....	.....
Wyoming	63	10	2008	.....	.....	.....	.....	.....	.....
IX. American Samoa	1	[4] 5	2003	.....	.....	.....	.....	.....	
Arizona	[3] 102	13	2011	.....	.....	.....	.....	.....	.....
California	512	13	2011	.....	.....	.....	.....	.....	.....
CNMI	2	4	2002	.....	.....	.....	.....	.....	.....
Guam	3	12	2010	.....	.....	.....	.....	.....	.....
Hawaii	18	9	2007	.....	.....	.....	.....	.....	.....
Nevada	38	13	2011	.....	.....	.....	.....	.....	.....
X. Alaska	65	[4] 10	2008	.....	.....	.....	.....	.....	.....
Idaho	[3] 728	8	2006	.....	.....	.....	.....	.....	.....
Oregon	1,168	1	2008	.....	.....	.....	.....	.....	.....

CURRENTLY LISTED WATERS SCHEDULED FOR TMDL DEVELOPMENT AFTER 2015 [1]—Continued

EPA region & State	Number listed waters	Schedule		Current commitments after 2015 [2]					
		Years	End year	2016	2017	2018	2019	2020	Total
Washington	[3] 631	15	2013	.....	.....	.....	.....	.....	.....
Totals	[3] 20,198	([7])	([7])	51.4	51.4	51.4	47.5	47.5	249.3
	.....	([8])	([8])	3.9	3.9	3.9	.....	.....	11.6

[1] Based on current commitments as reflected in the 1996 TMDL lists as of 12/11/98 and interim default assumption of a 22-year time frame where schedule is not available.
[2] Assuming proportionate development over the life of the schedule—estimates are shown to nearest 1/10.
[3] Approximate.
[4] Estimate based on draft schedule
[5] Temporary and conservative default assumption of 22-year schedule ending 2020.
[6] "Grandfathered"—Consent decree allows 20 years.
[7] Including default.
[8] Excluding default.

Attachment 2

ANALYSIS OF COST IMPACT OF TMDL ACCELERATION

For low-high assumptions for the TMDL development for States w/o schedules and low-high assumptions (1–2) for the number of TMDLs per water:

Discount rate (percent)	7
TMDL cost	$25,000

TMDL'S THAT WILL BE ACCELERATED DUE TO THE PROPOSED REVSIONS [1]

Assumption	2016	2017	2018	2019	2020	Total
High	102.791	102.791	102.791	95.091	95.091	498.555
Low	3.850	3.850	3.850	.....	.....	11.550

[1] The level of precision shown is not intended to indicate degree of accuracy, but rather to facilitate the ability of reviewers to check the calculations. No rounding was done for the projections from Attachment 1.

COST OF TMDL'S THAT WILL BE ACCELERATED DUE TO THE PROPOSED REVISIONS ASSUMING AN AVERAGE COST OF $25,000 PER TMDL

Assumption	2016	2017	2018	2019	2020	Total
High	2,569,773	2,569,773	2,569,773	2,377,273	2,377,273	12,463,864
Low	96,250	96,250	96,250	.....	.....	288,750

1999 PRESENT VALUE FOR CURRENT SCHEDULE FOR POST–2015 TMDLS AT 7 PERCENT

Assumption	2016	2017	2018	2019	2020	Total
High	$813,524	$760,303	$710,564	$614,332	$574,142	$3,472,866
Low	30,470	28,477	26,614	.....	.....	85,561

YEARLY COST AND 1999 PRESENT VALUE COST OF DEVELOPING THESE TMDLS PRIOR TO 2015

	High	Low	
Uniform development starting in 1999 through 2015	29.3	0.7	TMDL/year.
Cost per year from 1999 through 2015	$733,168	$16,985	Yearly Cost.
1999 PV cost for TMDLs that have been accelerated	$7,659,153	$177,439	1998 PV.

INCREMENTAL PV AND ANNUALIZED COST OF ACCELERATING TMDL DEVELOPMENT

Assumption	PV current	PV accel	Incr PV Cost	Annualized
High	$3,472,866	$7,659,153	$4,186,287	$400,730
Low	85,561	477,439	91,878	8,795

Ms. BROWNER. The numbers that we looked at, Mr. Chairman, and we made public as part of the proposal, are the costs to the States of managing the program. It is the cost in terms of what the States have to do, the science they would do to set the load, and the work they would do within a community to actually develop the plan.

TMDL PROPOSAL VS. NPDES BACKLOG

Senator BOND. That is where the States are very much concerned. And I am also very much concerned with EPA and the States taking on the new requirement and, at the same time, we have a large and growing backlog in the NPDES program, is not this TMDL workload going to limit EPA's ability to eliminate this material weakness?

Ms. BROWNER. No. We are continuing our efforts to address the NPDES backlog. We agree we need to do a better job, as I said last year when I appeared. These are the most complicated permits, which is why we are stuck with them and why we are managing them. We are providing additional funds to the States. For example, the State of Texas had a very large backlog. We provided funds to them. We are addressing this program.

It is separate and apart from TMDL's. In fact, in the future, TMDL's will allow you to better manage our NPDES process where a State makes a choice to use that as a tool. It is not a requirement. We are not saying that permits for non-point source will be required to meet TMDL requirements. But some States may use portions of their NPDES permitting program.

TMDL PROPOSAL: NPS AND FORESTY

Senator BOND. It seems rather apparent when you look at the statute that EPA does not have the authority to regulate the non-point source pollution. And I just wonder where you have that authority.

Ms. BROWNER. We have been very clear that when it comes to agriculture, we do not have authority to regulate non-point source pollution.

Senator BOND. And forestry as well?

Ms. BROWNER. The statute does not speak to forestry in the same manner. Well, in terms of non-point source, we do not have authority. In terms of agriculture, to require permits, we do not have authority.

It is sometimes the practice in the forestry community to divert water from their lands into for example, which culverts becomes a point source.

Having said that, Mr. Chairman, I want to be very clear about something. There are many forest companies that are engaged in good best management practices to address their water pollution

problems. I have been up here three times talking in committees about the fact that the TMDL proposal has created a lot of misunderstanding. I am the first to admit this is a problem for us.

One of the misunderstandings has been whether or not we would give credits, if you will, to a State program that relied on best management practices. The answer is yes. With reasonable assurances, absolutely, positively yes. Best management practices can be hugely successful.

Senator BOND. We still have a long way to go on this one. One of my particular areas of interest, we have funded research experiments on the use of agro-forestry buffer strips along stream banks, riverbanks, to use revenue-producing sources for farmers to capture the nutrients that they apply to the fields or that come from a livestock operation. So we are very much concerned. But I am also very much concerned about the TMDL proposal. And we will have further questions for the record.

Ms. BROWNER. If I can just say one thing, Mr. Chairman. It is not a one size fits all proposal. The point of TMDL's is to give the States 15 years to develop these plans and to give credit for the very kind of stream buffers you are talking about.

EPA STAFFING NEEDS

Senator BOND. We are reading just some of the comments you are getting. The comments that are coming in that we are seeing are that it is one size fits all, it is command and control. And there is a real lack of confidence in what the EPA is doing in the perceptions out there.

Let me just say that I will submit questions for the record. But we are concerned also about the GAO report, saying that EPA lacks assurance that its employees are being used consistent with the intent of congressional appropriations. The I.G. reported 3 years ago that in two regions it reviewed, 42 percent of the employees worked in areas unrelated to the program areas to which their time was charged. And we are concerned about that and how we know that the money is going to the programs for which it has been appropriated.

Finally, in making staffing decisions, EPA apparently has not taken into consideration whether the activities at the State level have altered EPA staffing requirements. States now assume responsibility for more than three-quarters of the Federal environmental programs, a much greater proportion than they did previously. Also, EPA does not consider whether technological advances have altered the EPA staffing needs. We see this as another concern with respect to staffing.

If you would like to take a minute to respond to that.

Ms. BROWNER. Very quickly. I think you made reference to an increase in FTE's from 1990 to 2001. I hope you can appreciate that the vast majority of that did not happen under this administration; it happened under Mr. Bush. There was a big growth at the end of the Bush administration at EPA.

Senator BOND. But it has continued to go up since then. Others are coming down.

Ms. BROWNER. That is because this President has said repeatedly that one of his priorities is strengthening environmental protection.

It is, in part, a response to the fact that this Congress has given us two new laws to implement, the Safe Drinking Water Act and the Food Quality Protection Act. I am not saying that it has gone down, but I am saying that the rate of growth over the last 10 years, the lion's share of it, has not been under this administration. We are doing more, effectively, with less.

Senator BOND. Thank you, Madam Administrator. Due to the press of the floor action, we now declare the hearing adjourned.

Ms. BROWNER. Thank you.

ADDITIONAL COMMITTEE QUESTIONS

Senator BOND. We will submit further questions for the record.

[The following questions were not asked at the hearing, but were submitted to the Agency for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR CHRISTOPHER S. BOND

TOTAL MAXIMUM DAILY LOAD (TMDLS): WORK LOAD AND FUNDING REQUIREMENTS

Question. Is it true that one TMDL would need to be approved each workday for the next 15 years by each of the 10 EPA regional offices to complete all of them? If not, what is EPA's estimate, and will EPA be requesting a sufficient increase in funding to accomplish this requirement? What will this cost over the next 5 years?

Answer. Current state Section 303(d) lists would encompass about 40,000 TMDLs. Approving all these TMDLs over the next 15 years would on average translate into one TMDL being approved each workday in each EPA Regional office. This is a significant workload for EPA and is beyond what we are now devoting to the TMDL program. We are encouraging states to realize efficiencies by "bundling" TMDLs for segments on a watershed basis, thus reducing transaction costs associated with administrative processes and providing for more meaningful public involvement. These efficiencies can reduce EPA review and approval costs as well. The Agency analysis of its outyear resource requirement is ongoing.

TMDLS VS. NPDES PERMIT BACKLOG

Question. How will EPA and the states both take on this new requirement, as well as eliminate the large and growing backlog in the NPDES permit program?

Answer. The President's request includes a substantial increase (+$45 million) explicitly to assist states in the development of TMDLs. This increase, coupled with the required state contributions for this increase, state flexibility to use up to 20 percent of their also increased Section 319 grant, and other available financial assistance would provide sufficient resources to allow states to substantially meet their TMDL obligations in 2001 based on the estimated cost of the new TMDL regulation proposed in August 1999. While earmarked for TMDL development, this increase in grant funding should allow states to reallocate existing base grant funds to their most significant priorities, including addressing their NPDES permit backlog. The President's 2001 request also includes an increase of $5.3 million for the NPDES program, a portion of which should help to address the permit backlog. The Agency also provides substantial technical support for state TMDL development and NPDES permitting efforts in our operating programs. Resources are also used by the Agency to address the backlog of expired permits in non-delegated states and are instrumental to the development of state water quality standards which serve as the environmental endpoint to which TMDLs are geared.

TMDL EFFECT NPDES BACKLOG

Question. Won't the new TMDL workload limit EPA's ability to eliminate the backlog, an area which has been declared a material weakness and an area where no progress has been made in the last year?

Answer. EPA is committed to reducing the NPDES permit backlog as expeditiously as possible. For 2001, EPA has established a performance goal, under the Government Performance and Results Act, that the backlog of permits for major point sources will decrease from the current level of 28 percent to 10 percent. While striving to meet these targets, EPA and the states must ensure that permits are consistent with the core NPDES regulations, demonstrate that appropriate permit development procedures were followed and documented, and ensure permit condi-

tions are consistent with national policy and guidance. The fiscal year 2001 budget requests an additional $5 million to address the broad range of NPDES program activities, including work to address the backlog.

TMDLS: ASWIPCA CONCERNS

Question. According to the Association of State and Interstate Water Pollution Control Administrators, "state program budgets and staffing levels are not sufficient to implement the regulation as it now stands and even with significant increases in funding they will not likely grow in order to meet an ambitious waterbody restoration agenda merely because an arcane federal regulation is changed." How do you respond to that concern?

Answer. We appreciate that states face a significant workload to carry out the TMDL program. We are working with the states to determine overall state needs versus available resources to carry out all their Clean Water Act responsibilities, including TMDLs. States are now completing their accounting of what they are currently spending.

EPA wants states to succeed in implementing the TMDL program and is fully prepared to work with them to assure that all states are able to effectively carry out their responsibilities. EPA has proposed to substantially expand fiscal year 2001 funding for grants to states for water pollution control. The President's Budget proposes increased funding of $45 million for grants to states to identify and address the remaining polluted waters around the country. This increase, coupled with the required state contributions for this increase, state flexibility to use up to 20 percent of their also increased Section 319 grant, and other financial assistance would provide sufficient resources to allow states to substantially meet their TMDL obligations in 2001 based on the estimated cost of the new TMDL regulation proposed in August 1999.

TMDLS: NONPOINT SOURCE DATA

Question. GAO testified recently that only 3 states have a majority of the data they need to develop TMDLs for nonpoint sources. How will states get the information they need to develop TMDL's for Nonpoint sources?

Answer. EPA recognizes that state ambient monitoring activities have not always kept pace with growing data needs, including those for the TMDL program. We have requested a substantial increase in Section 106 funds in fiscal year 2001 [+$45 million] specifically for states to help improve their Section 303(d) lists and TMDL development. Also, with our requested $250 million for Section 319 grants and our continued 319 grant policy allowing states to use up to 20 percent of their 319 funds for nonpoint source (NPS) program development activities including TMDLs, States will have the ability to use up to $50 million of these funds to develop NPS TMDLs including necessary data collection.

We believe States can take needed actions based on the data they have collected. The proposal does not change what is already required in the existing TMDL regulation; namely, that listing of waterbodies and establishment of TMDLs be based on all readily available existing information. In addition, some widespread kinds of water quality impairments can be identified without sophisticated measurements, such as nutrient over-enrichment and sedimentation. The later and more complex steps of quantifying the extent to which these pollutants exceed the assimilative capacity of a listed water and apportioning load reductions needs to occur when a TMDL is developed—which under our proposal may be as long as 15 years after listing allowing sufficient time to obtain any necessary additional data.

NEPPS PROGRAM

Question. The TMDL proposal raises serious concerns about EPA's commitment to working in partnership with the states. Concerns about the State-EPA relationship is reinforced in a recent independent analysis of the National Environmental Performance Partnership or NEPPS program. The analysis by Ross and Associates, a well-known and widely respected consulting firm, found that "progress to date falls substantially short of the overall promise and potential of NEPPS to improve the state/EPA partnership and enhance the achievement of environmental results." They found continued disagreement about the role of EPA in enforcement and compliance, the level of necessary oversight, the types of data states should report to maintain accountability, and the amount of work sharing that should occur. EPA and the States signed the NEPPS partnership agreement in 1995, yet five years later major barriers continue to exist. Why?

Answer. With respect to your comment on the TMDL proposal, EPA and the states are close partners, as well as co-regulators, who ensure water quality stand-

ards are maintained throughout the country. EPA values its partnership with states and spends much time to foster it. For example, EPA has committed many hours and resources to working with the states on the TMDL proposal. In addition to numerous one-on-one discussions, EPA and states have had lengthy discussions of TMDLs at every meeting of both the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) and the Environmental Commissioners of the States (ECOS) for the past few years, both to help craft the proposed rule, and to discuss changes needed for the final rule. EPA also held a special two-day co-regulators TMDLs Forum with the states in December to discuss the proposed rule and the states' views on how it should be changed, and another one-day forum in March. While the 50 states have varied perspectives about, and resources to support, TMDLs, EPA has taken care to discuss each concern and is crafting the final rule to ensure it provides states the flexibility needed to implement the Rule to meet their particular conditions and ensure attainment of water quality. At the ECOS Spring meeting this past April, several State Commissioners were highly complimentary of EPA's partnership work with the states on TMDLs. We also note that EPA has been successful in acquiring additional resources for states to support their TMDL work: an additional $5 million in fiscal year 1998–2000, and a Presidential request of an additional $45 Million in fiscal year 2001.

With respect to your question on barriers to NEPPS, we are familiar with Ross and Associates' summary of NEPPS evaluations. In their summary, Ross and Associates conclude that both state and EPA staff believe that NEPPS has not reached its full potential, given underlying problems with NEPPS implementation. We agree with their conclusion, and continue to work closely with state agencies and ECOS to resolve those underlying problems. We would point out, however, that the quote you have cited does not reflect all of Ross and Associates' conclusions about NEPPS. Ross and Associates also concluded that:

"The majority of those interviewed for these reports supported the philosophy and objectives of NEPPS. All the reports found that participants in the NEPPS process believed that it had been beneficial and had improved the state-EPA relationship. In particular, the evaluations identified improved communications between EPA and the states, as well as greater senior management attention to program priorities and issues, as frequently cited NEPPS benefits."

In addition, within the past month, both EPA and ECOS have reaffirmed their commitment to the principles of NEPPS. These reaffirmations signify the intention of EPA and states to build on the progress that NEPPS has fostered over the past five years. EPA has planned several activities for the next several months aimed at improving NEPPS. EPA's goal for NEPPS for the remainder of fiscal year 2000 and beyond is to build upon earlier successes by focusing on four objectives. These objectives are:

—continued improvement of Performance Partnership Agreements between regions and states;
—increasing use of Performance Partnership Grants to support NEPPS;
—reducing reporting burden on states; and
—greater use of results measures to manage programs.

By pursuing these objectives, EPA and the states will develop the institutional capacity for NEPPS that is necessary for further progress in performance partnerships. EPA and ECOS already have taken steps toward these objectives. In April 1999, the ECOS membership voted in favor of the fiscal year 2000 Core Performance Measures (CPMs). These latest CPMs, designed by joint EPA-state committees, include more results measures and fewer activity measures than ever before. EPA has planned further joint activities, such as training of EPA staff on NEPPS principles, that also will help us build the institutional capacity for NEPPS.

EPA RELATIONSHIP WITH STATES: ACHIEVEMENTS AND IMPROVEMENTS

Question. What specific examples can you cite of achievements and improvements vis-a-vis the state-EPA relationship in the five years?

Answer. In addition to working jointly with state agencies and the Environmental Council of the States (ECOS) on the National Environmental Performance Partnership System (NEPPS), EPA has several ongoing joint ventures with state agencies that demonstrate achievements and improvements in the state-EPA relationship. In 1998, EPA and ECOS created the State-EPA Information Management Workgroup. This workgroup developed a set of operating principles which now govern our data and information management activities. Recently, the Information Management Workgroup developed an agreement and charter for a Data Standards Council. Recently adopted by ECOS membership, the Data Standards Council is tasked to de-

velop data standards that will ensure that EPA and state environmental programs can share data electronically. EPA's Office of Enforcement and Compliance Assurance established a State-EPA Enforcement and Compliance Forum to involve the states in establishing priorities and to examine the effectiveness of new directions in these programs. States also participated on FACAs to advise the Agency on how to implement Title VI of the Civil Rights Act, and how to improve the TMDL program.

The Office of Air and Radiation provides an in-depth example of EPA's efforts to strengthen partnerships with the states. Highlights over the last year include the following:

—In September 1999, a workshop was held in Chicago on strategic directions for the National Air Program over the next 10 years. The joint planning session was attended by 27 senior managers from agencies charged with air quality management, including representatives from ECOS, State and Territorial Air Pollution Program Administrators (STAPPA), Association of Local Air Pollution Control Officials (ALAPCO), the Executive Committee of the National Tribal Environmental Council (NTEC) and EPA. The workshop's focus was on developing a collective national, strategic approach to the challenges facing air quality managers at all levels of government over the next 10 years. This collective agreement on the air program's vision and goals reached at the workshop has been used to inform revisions made to EPA's Strategic Plan to be published in the Fall of 2000. A document entitled "National Air Quality Program: Joint Statement on Vision and Goals" is in progress and will be published in the near future. The Chicago meeting and resulting Joint Statement are the first milestones in what is intended to be an ongoing strategic dialogue among the Nation's air quality management partners.

—In February 2000, the Office of Air and Radiation convened its first National State and Local Air Roundtable in Florida. The purpose of this forum is to bring together leaders in state and local air program administration three to four times per year to assess how we are working together to achieve air quality goals and to discuss issues of mutual concern.

Objectives of the Roundtable include: (1) creating a sounding board for early identification of and feedback on important issues; (2) promote early engagement of state and local air administrators as policies and programs develop and evolve; (3) encourage creative, collective problem-solving; and (4) enhance trust among Federal, state, and local partners. The next meeting is scheduled for June 2000.

FINANCIAL AUDIT: IG OPINION

Question. Why did the IG not give EPA's 1999 financial statements a clean opinion, and where are you in tracking down the funds which could not be accounted for?

Answer. Toward the end of the audit, the IG questioned amounts in two of our financial statements that could not be resolved and audited before the statutory due date of March 1. The issues in question did not relate to a loss or misappropriation of funds, but rather to the sources or composition of aggregated amounts. One of the questioned amounts was reflected in a footnote to our Statement of Changes in Net Position and the other in our Statement of Financing. KPMG, the accounting firm that assisted us in preparing our 1999 financial statements, has developed documentation to respond to concerns raised by the OIG on the Statement of Net Position. We also engaged a general ledger expert from the Treasury's Financial Management Service who confirmed our analysis of the amount questioned in our Statement of Financing.

FINANCIAL AUDIT: TIMELINE FOR IG RECOMMENDATIONS

Question. The Inspector General made a number of recommendations last year to improve financial systems at EPA. None of the recommendations have been implemented, the IG told my staff. Why, and what is the time for doing so?

Answer. We have taken important steps to address financial systems concerns raised by the IG. For example, we made significant improvements in the security plans for our major systems, as recommended by the IG; increased resources devoted to security; tested and updated disaster recovery plans for our agency-level financial system; reviewed, updated and re-certified user access to financial systems; improved coordination on security issues between various offices in EPA, including the offices that own systems with financial information, the new Office of Environmental Information, and others; and upgraded security awareness training for our system users.

We are now in the process of implementing an on-going risk assessment program based on the GAO model. We engaged the National Security Agency to assess our overall financial system security controls for compliance with Agency and federal security policy and to make specific recommendations for strengthening our controls. Almost concurrently with the completion of the NSA review, the General Accounting Office conducted a review of the Agency's computer security infrastructure and made constructive suggestions. We then had a follow-up meeting with GAO to discuss implementation of their risk assessment model for the Agency financial systems.

INTEGRATED FINANCIAL MANAGEMENT SYSTEM (IFMS) REPLACEMENT

Question. The I.G. indicates that EPA's Integrated Financial Management System is an outdated and inefficient system. The CFO had identified IFMS in its budget in previous years, but replacement has been put off for other operational priorities. They further indicated that EPA's financial systems costs were 38 percent more than other federal systems and 9 percent higher than the private sector. Why hasn't replacing IFMS been a priority, and what are the plans and timeline for replacement?

Answer. We agree that IFMS is an old system and it remains a priority for the Agency to begin looking at alternatives for modernizing or replacement. However, we delayed our replacement efforts in fiscal year 2000 until fiscal year 2001 to ensure we adequately address other key system challenges such as security, and successful resolution of the Y2K issue. We also took into consideration that there were new commercial off-the-shelf federal systems currently being introduced and tested by the Joint Financial Management Improvement Program. We thought our business case decisions would be better informed waiting for the results of the new system tests. And while IFMS is an old system, it currently performs our core functions in a reliable manner because of our continuous upgrades.

In addition, the financial systems cost figures cited by the IG should also be put in proper context. The figures were taken from a benchmarking study initiated by EPA Office of the Chief Financial Office through the governmentwide CFO Council. The study compared our financial processes to the processes of other government agencies and large corporations. The figures cited by the IG show only part of the story. In fact, EPA ranked significantly higher in most measures of the efficiency of financial operations and that our overall financial management costs are well in line with the average.

PEER REVIEW

Question. For quite some time there have been concerns about the adequacy of EPA peer review procedures, leading to potential questions about the reliability of EPA science. In 1997, GAO reported that implementation of EPA's peer review policy was uneven across the agency. In response, EPA put out some guidance to clarify the peer review requirements. But a September 1999 IG report identified problems where in some cases peer review leaders did not effectively attempt to determine whether conditions existed which would compromise an independent review. Why hasn't EPA made a higher priority of getting it right with its peer review procedures? Are you confident the problems identified by GAO and the IG have been corrected?

Answer. Consistent Agency-wide application of peer review policy and procedures has been an EPA priority for several years. Pursuant to the Administrator's June 7, 1994, Peer Review Policy statement, EPA in 1998 issued its Peer Review Handbook. The Handbook outlines peer review principles and procedures including issues raised in the 1997 GAO Report. GAO cites the Handbook in its 1999 report on peer review at federal agencies. The 1999 IG report notes that the Handbook "provides a format that offers all users a focused reference on peer review issues." The IG also notes that EPA's Program offices and Regions provided Handbook training to staff and managers in 1998.

The concerns in the IG's 1999 report focused on potential conflict-of-interests concerns of peer reviewer candidates, although the IG found no case of actual conflict of interest. The IG recommended that EPA's Office of Research and Development provide supplemental guidance directing contractors and peer review leaders to inquire whether a potential reviewer has or had a financial relationship with the Agency. The IG agreed with EPA that providing supplemental guidance, rather than revising its 1998 Peer Review Handbook, would be an effective way to address the IG's concerns.

EPA will currently drafting the supplemental guidance to address this issue, as well as other secondary issues. We are confident that these additional actions address GAO and the IG's concerns.

MEXICO BORDER: OBLIGATIONS AND PROJECTED END OF YEAR BALANCE

Question. How much of the funds appropriated for border infrastructure projects have been obligated, and what do you anticipate the year-end balance to be?

Answer. Of the $475 million appropriated for border infrastructure projects since 1995, $359.7 million has been obligated. EPA expects to obligate all of the current unobligated balance of $115.3 million by year-end. Except for $54 million awaiting Congressional action on the San Diego/Tijuana international wastewater treatment project spending cap, processing of grants/amendments to obligate all except $2.2 million of this unobligated balance is under way.

MEXICO BORDER: FUNDED PROJECTS AND NEEDS

Question. Please provide a break-out of all projects funded under this program to date, and the remaining needs that have been identified (including funding requirements).

Answer. Since 1995, the border projects funded with EPA assistance to date, either through direct grants or through its Border Environment Infrastructure Fund (BEIF) grant to the North American Development Bank (NADBank), are shown in the attached table. In addition, the NADBank has estimated the project costs for work to be certified between June 2000 and the end of Year 2002 in which EPA is likely to participate. Those project costs total $466.5 million of which the EPA share is anticipated to be $233.8 million.

MEXICO BORDER: MEXICAN CONTRIBUTION

Question. What has been the Mexican contribution to projects already funded, and what is anticipated for future projects?

Answer. The Mexican government participates in those projects in Mexico listed in the attached table that are funded through the Border Environment Cooperation Commission (BECC) certification/NADBank funding system. That group, as shown in the attached chart, totals $369.3 million. The Mexican share as reported by NADBank is approximately $109.3 million, the EPA share $106.8 million and the balance locally funded. EPA anticipates that it will continue its agreement to a one-for-one match of Mexico's federal and state grant shares, on a cumulative basis, for projects in which the U.S. has an interest. The grant amounts are arrived at after the local debt capacity of a community is reviewed by the NADBank.

MEXICO BORDER: FUNDED PROJECTS AND RESULTS

Question. What is the status of projects to date, and what environmental results have been produced?

Answer. Some of these projects are in operation, some under construction and some in the final design/procurement for construction stage. Any project that has been certified by the BECC has had its environmental review and financial package completed, so that preconstruction time has been minimized. All are for either municipal wastewater collection and treatment or public water supply and distribution, some are for both. Wastewater and drinking water infrastructure investments in the Mexico Border area will yield environmental and public health results. For example, operation of the international wastewater treatment plant (ITWP) in San Diego, that manages sewage from Tijuana, significantly reduced beach closures in Southern California last summer. Several other plants are about to come on-line. By the end of 2001, 600,000 more people (cumulative total of 11 million people) in the Mexico Border area will be protected from health risks because of adequate drinking water and wastewater sanitation systems funded through the Border Environmental Infrastructure Fund.

MEXICO BORDER: ADDRESSING GREATEST THREATS

Question. What assurances are there that EPA funds for border activities are directed at the greatest environmental threats?

Answer. EPA funds for water and wastewater infrastructure on the border are directed to those projects that have been developed to the level at which they are ready for final design and construction. All projects for EPA participation are screened under an EPA policy applying funding eligibility criteria, which includes an affordability index used to determine whether a community may be unable to provide the needed improvements without assistance. Finally, the BECC certifi-

cation and process is the mechanism to assure that, after public participation and input, only high priority projects relating to public health and the environment are brought online.

MEXICO BORDER: NADBANK

Question. It appears that EPA grants have provided the major source of assistance provided by NADBank. What efforts are underway to make the NADBank work independently of federal grants? What are the major impediments to a more successful NADBank and Border Projects?

Answer. The concept of the Border Environmental Infrastructure Fund (BEIF) grant is to make the project affordable for the community. By providing grant assistance as part of multi-agency funding package, a community is able to implement revenue sources, including user rates and reserves, that results in financial sustainability of its water and sewer services. Historically, EPA grant fund participation in a project using the BEIF has averaged about one-third of the costs for projects that meet out funding criteria. No commitment of EPA grant funds from the BEIF are made until the NADBank identifies funding commitments from all other sources and notifies EPA of the amount needed to complete the multi-agency funding package. EPA expects the rate of its participation to increase as additional projects in poorer communities as well as larger projects come to the forefront. Without EPA grant funds, most of these projects would simply not be completed.

DRINKING WATER SRF: STATE MATCH

Question. Have all states established and provided the requisite matching funds for DWSRFs? If not, which states have not?

Answer. All but two states, Rhode Island and Louisiana, have provided the required 20 percent match for Drinking Water State Revolving Fund (DWSRF) capitalization grant funds. Rhode Island, which had difficulty obtaining the match for its fiscal year 1997 and 1998 grants, is now having difficulty obtaining the match required for its fiscal year 1999 grant of $7.5 million. The Regional Administrator for EPA's Region I office has communicated her concern to the Governor of Rhode Island that the State could lose the opportunity to fund important drinking water projects should it fail to provide the required match. Louisiana is having difficulty providing the match for its fiscal year 1998 and 1999 grants. Louisiana also does not have matching funds committed for its fiscal year 1999 grants that, to date, has not been awarded.

DRINKING WATER SRF: UNOBLIGATED BALANCE BY STATE

Question. What is the unobligated balance in this program, by state?

Answer. EPA obligates funds to the states through the award of capitalization grant funds. States have two years to apply for and receive a grant award from a specific annual appropriation. As of April 13, 2000, EPA had awarded $2.4 billion of the $3.6 billion appropriated to the program in fiscal years 1997, 1998, 1999 and 2000. Attached is a state by state breakout of this unobligated balance.

CLIMATE CHANGE TECHNOLOGY INITIATIVE

Question. How much of your appropriation for fiscal year 2000 and your request for fiscal year 2001 is targeted to publicizing the benefits of energy efficiency and how much is targeted to recruiting new participants?

Answer. The majority of EPA's fiscal year 2000 funding is used to deliver technical information to program participants so that organizations and consumers can choose energy efficient solutions that save money while reducing air pollution. EPA's appropriations are strategically focused on removing market barriers that impede organizations, businesses, governments and consumers from investing in cost-effective energy-efficient technology. EPA's appropriations are used to develop essential decision-making information and tools such as previously non-existent information on product performance, strategic plans for whole building upgrades, product specifications for energy efficient equipment, building performance assessment tools, and financial assessment tools. Less than 5 percent of our fiscal year 2000 funding is targeted to education and outreach on the benefits of energy efficiency. Also, less than 5 percent of our fiscal year 2000 funding is targeted to recruiting new participants. Similar portions of our fiscal year 2001 request would be targeted to these activities.

CCTI: EMISSION REDUCTIONS

Question. The budget justification states that in fiscal year 2000 your programs will achieve reductions of 58 million metric tons from projected levels. How do you know that participants are reporting reductions from their projected levels, rather than reductions from historic levels? Are participants in these programs required to report their net reductions in energy use and greenhouse gas emissions, as opposed to their gross reductions? To what extent do you verify reports independently by participating companies?

Answer. A variety of information and a number of factors are taken into account to determine the emissions reductions associated with EPA's programs. Taking Energy Star products as an example, emissions reductions are estimated directly from product sales data that are readily available for a range of products. Combined with regional emissions factors and operational data, EPA can estimate the savings and emissions reductions from the increased presence of more efficient equipment in our homes and buildings. These are net savings and emissions reductions that would not exist without the program. A number of the programs get information directly from reports from program participants. Estimates of net savings and emissions reductions are derived from these partner reports while taking account of other important factors such as free ridership (i.e., some organizations would have taken some action without the program) and free drivership (some organizations have benefitted from the information made available by the program without joining as a participant and reporting results). EPA expends considerable effort checking the reports that participants provide to ensure accuracy.

HIGH PRODUCTION VOLUME CHEMICAL TESTING

Question. This voluntary testing program will provide enormous amounts of information about chemical hazards. What process will EPA use and what money has the Agency set aside for using that information to evaluate the risks for those chemicals?

Answer. The screening level human health and environmental effects information being developed by industry sponsors under the High Production Volume (HPV) Challenge Program will be provided to the Agency in what is called "robust summary format," a format developed for the HPV Challenge Program and accepted for international data sharing by the Organization for Economic Cooperation and Development (OECD) in its HPV Screening Information Data Set (SIDS) Program. This information will be posted to the Internet for review and assessment by both Agency personnel and outside interested parties.

Once this basic hazard information is available on a chemical, it may be used to provide a platform to begin to address the question, "how safe is this chemical?" EPA has existing risk assessment guidelines to prepare and prioritize chemicals for risk assessment. It must be noted that the hazard information being provided through the HPV Challenge Program is screening level data intended only to support the initial stage of assessing chemical hazards. HPV data would not be sufficient on its own for the preparation of formal risk assessments; additional hazard data (e.g., carcinogenicity; neuro-toxicity; etc.) and exposure data would be needed to conduct risk assessments. The resources requested for of the Chemical Right-to-Know Initiative will be fully encumbered in collecting, managing, and disseminating the limited hazard screening data and will not be used to develop formal risk assessments on any HPV chemicals.

In fiscal year 2000, the Operating Plan for the CRtK Initiative is $11.1 million, with approximately $10 million directed at HPV chemicals and $1.1M supporting the start-up of the program to address chemicals of special concern to children. EPA's fiscal year 2001 President's Budget Request contains a $12.6 million request for the CRtK–HPV program. During the initial data collection phase of the HPV program, the bulk of these resources must be dedicated to managing and reviewing the incoming data. Public outreach efforts in these early years of the program will include a dialogue with stakeholders to determine how they will use the data in order to identify the most appropriate formats, tools, and vehicles for effective public hazard communication. Public outreach will assume a steadily higher profile as data actually become available and are reviewed, and as additional resources are provided.

HIGH PRODUCTION VOLUME CHEMICAL TESTING: COMMUNICATION

Question. Beyond simply "posting" the numbers and test results on the internet, what steps are you taking and resources are you allocating to ensure that the infor-

mation voluntarily provided by industry will be communicated to the public in a way that means something to them?

Answer. Using established risk assessment guidelines, EPA plans to use the toxicity data to produce plain English chemical information profiles, Chemical Advisory notices, website enhancements, and other information tools as appropriate on individual chemicals of concern. EPA will work with the Consumer Product Safety Commission, the Occupational Safety and Health Administration, and other agencies to distribute this information to workers, consumers, parents, teachers, community leaders, public interest groups, companies, and others. EPA intends to use the information and experience it has gained in other public safety and education projects to create and distribute simple and understandable messages to the public.

In addition, by classifying chemicals as presenting high, medium, or low hazard concerns, the Agency may be able to explain to the public the hazards of a chemical in simple and practical terms. In the future, this could then be combined with exposure information (e.g., chemical use profiles and exposure scenarios relevant to the specifics of individual chemicals) to assess, at a screening level, the potential risks presented by the chemical to people or the environment in various defined circumstances—for example, to workers, to users of consumer products, or to the environment. The hazard of a chemical is generally seen as an "intrinsic" aspect of the chemical, whereas uses and exposures can change and be "situational" depending on the particulars of a given commercial application. For this reason, clear and concise hazard information may be useful outputs of HPV screening to the public.

EPA realigned $1.3 million of its fiscal year 1999 Enacted Operating Plan to initiate the Chemical Right-to-Know Initiative (CRtK). In fiscal year 2000, the Operating Plan for the CRtK Initiative is $11.1 million, with approximately $10 million directed at HPV chemicals and $1.1 million supporting the start-up of the program to address chemicals of special concern to children. EPA's fiscal year 2001 President's Budget Request contains a $12.6 million request for the CRtK–HPV program. During the initial data collection phase of the HPV program, the bulk of these resources must be dedicated to managing and reviewing the incoming data. Public outreach efforts will include a dialogue with stakeholders to determine how they will use the data in order to identify the most appropriate formats, tools, and vehicles for effective public hazard communication.

CHLOROFORM RULE: AGENCY RATIONALE

Question. In December 1998, EPA announced its decision to promulgate a national primary standard of zero for chloroform in drinking water. EPA decided to set a zero standard despite scientific evidence that the Agency's existing "linear, no threshold" carcinogen policy was scientifically unjustified for chloroform. That policy, a "conservative default assumption," assumes that any exposure to carcinogens poses some cancer risk, in contrast with the national policy for non-carcinogens which recognizes that below a specified level there is no risk of adverse effects. The Agency's own scientists, along with leaders of the Society of Toxicology and many others, agreed that extensive scientific data on the "mode of action" by which chloroform causes cancer supported departure from the conservative default assumption and promulgation of a less-stringent standard of 300 parts per billion. Yet EPA chose to ignore the weight of the scientific evidence and, for seeming political reasons, to stick with its old default assumptions. That EPA decision raises significant concerns that no matter how much new scientific evidence is generated the Agency will ignore that science if it is inconsistent with its agenda. If so, why spend millions of dollars generating new data? Can you explain EPA's rational for this particular decision?

Answer. As part of a large-scale regulation promulgated in December 1998 under the Safe Drinking Water Act, EPA published a health-based goal for chloroform (the maximum contaminant level goal or MCLG) of zero. EPA provided new data and analyses concerning chloroform for public review and comment, including a different mode of action approach for estimating the cancer risk, but did not reach a conclusion on how to use that new information in establishing the final MCLG, pending further review by the Science Advisory Board (SAB). The zero MCLG was challenged by the Chlorine Chemistry Council and others in the Court of Appeals for the District of Columbia; the maximum contaminant level (MCL) for trihalomethanes, which includes chloroform, was not challenged.

After review of the SAB report, EPA concluded that it should withdraw the MCLG for chloroform and engage in further rulemaking proceedings on the MCLGs for the trihalomethanes and take additional regulatory actions consistent with all information available to the Agency, including the SAB report and other best available peer

reviewed science. The Court recently vacated the MCLG for chloroform and has indicated it will ask the parties to address further remedies.

IRIS DATABASE: ACCURACY OF DATA

Question. Many Federal and state environmental programs rely on EPA's IRIS (Integrated Risk Information System) database for making decisions. Concerns have been raised as to the currency and accuracy of the information in the database. What is the Agency doing to ensure that the IRIS database, on which many federal and state programs rely, contains the best available scientific information about the substances contained in the database?

Answer. Since 1995, EPA has taken several steps to ensure that the best available scientific information is included in IRIS assessments. On an annual basis, EPA announces the next set of chemicals to be considered in the IRIS program, either to update an older assessment, or to be added to the database. This announcement includes a request for all relevant information to be submitted to EPA for consideration in the assessments. In addition, all IRIS assessments go through an external peer review, which can include a public meeting permitting more notice of relevant information. All scientific questions and responses generated through the external reviews are available to the general public.

In addition, in its fiscal year 2000 Appropriations Committee Report, Congress directed EPA to "consult with the Science Advisory Board (SAB) on the design of a study that will (a) examine a representative sample of IRIS health assessments completed before the IRIS Pilot Project, as well as a representative sample of assessments completed under the project and (b) assess the extent to which these assessments document the range of uncertainty and variability of the data. The results of that study will be reviewed by the SAB and a copy of the study and the SAB's report on the study sent to the Congress within one year of enactment of this Act." EPA consulted with the SAB Nov. 29, 1999 and again on March 7, 2000 on an approach to this study. The study is now underway. Though not specifically addressing currency or accuracy, the study will determine whether IRIS assessments developed using a new process adequately presented and discussed the range of uncertainty and variability in the data used to develop the assessments.

IRIS DATABASE: AGENCY RESOURCES

Question. How much money is the agency allocating to improving the IRIS database?

Answer. For the fiscal year 2001 President's Budget Request, EPA requested a total of $1.7 million to support the Integrated Risk Information System (IRIS) database. Some key areas of effort in 2001 will include producing, updating, and maintaining health assessments on IRIS, ensuring appropriate external peer review of IRIS summaries and support documents, facilitating Agency consensus and resolving issues in a timely manner, and maintaining a widely-accessible Internet version of IRIS, available at the local level to support community-based environmental protection.

Question. How many staff resources are allocated to this?

Answer. For the fiscal year 2001 President's Budget Request, EPA requested a total of 7.8 work years to support the IRIS database.

PROJECT XL: PROGRESS IN NEGOTIATING AGREEMENTS

Question. What is the cause of the slow progress in negotiating agreements with applicants in the XL program?

Answer. When Project XL was launched in 1995, there were no models to draw upon. The first few XL projects posed many challenges. EPA and others had concerns about how to test new approaches and yet still maintain the same level of protection that the current regulatory system provides. Predicated on experimentation, Project XL has evolved through continuous improvement, first in policy and procedures, and second in program structure and process.

In 1997, EPA announced new XL policy guidance. This Federal Register notice invited stakeholders to be co-sponsors of proposals and described changes made to streamline and improve the negotiation process, highlighting for the first time preproposal discussions as important to the building of good ideas, proposals, and relationships. Most importantly, it clarified three project selection criteria: superior environmental performance, regulatory flexibility, and stakeholder involvement. This guidance also set the stage for EPA's next task: reducing transaction costs.

Specific Concerns Addressed

In 1998, EPA—with industry representatives, environmental organizations, states, and other interest groups—worked together to streamline the proposal development and negotiation process by reducing transaction costs and improving stakeholder involvement. Through the reengineering process and ongoing experience, EPA continues to learn about how to run an innovative program like Project XL (e.g., we can now be more specific about what a quality proposal should contain, how decisions should be made, and what a reasonable process should entail).

The Agency also developed several tools to help project sponsors, EPA staff, and citizens create successful projects. For example, the Best Practices Guide for Proposal Development, written specifically for project sponsors, gives greater clarity in determining what makes a good proposal. The Stakeholder Involvement Guide shows project sponsors and stakeholders how to work effectively on XL projects. Technical assistance is now available to stakeholder groups participating in project negotiations. Finally, EPA contracts with professional facilitators to get stakeholder discussions and internal EPA teams off on the right track.

Results of the new process

We now expect this new process to yield agreements for most projects in six months to a year, compared to 24 months or longer under the old process. For example, the Atlantic Steel Redevelopment project, in Atlanta, Georgia, produced a signed project agreement for phase one, eight months after initial pre-proposal discussions. The Exxon Superfund project in Fairmont, West Virginia, also produced a signed agreement eight months after an initial pre-proposal was submitted.

EPA has signed 21 final XL agreements and is negotiating an additional 29 projects that are expected to be signed and implemented in fiscal year 2000.

PROJECT XL: EXAMPLES

Question. One of the key elements of the XL program is testing ideas for innovative approaches to environmental management. Please provide examples of where EPA has integrated into its normal operations an innovative approach that was found to be successful in an XL project.

Answer. In fiscal year 1999, EPA reported 30 innovations resulting from XL projects that have the potential to improve traditional regulatory programs. Overall, EPA and its partners have found that XL projects produce greater reductions in environmental releases than would have occurred under conventional regulatory approaches. At the same time, XL project participants reduce environmental management costs and improve their competitiveness as a result of expedited or consolidated permitting, reduced record-keeping and reporting requirements, and greater operational flexibility afforded by facility-wide emission caps.

Eight innovations are fully implemented, and the remaining innovations are in subsequent stages of testing or development prior to being incorporated into core Agency functions. The Agency is developing approaches to incorporate the remaining innovations into mainstream EPA activities. However, the time frames for executing these changes are tied to legislative requirements for rule-making and regulatory guidance that requires comprehensive analysis, and adequate opportunities for public review and comment. Likewise, some innovations are tied to experiments that are in the early stages of development and have not yet produced verifiable and replicable results.

Below are the eight XL innovations (5 regulatory and 3 institutional changes) that have been incorporated into a permanent regulatory change or adopted into Agency operations.

Regulations:

Voluntary effluent discharge limitations

Pulp and Paper Cluster Rule.—Voluntary effluent discharge limitations; participation in Voluntary Incentives Program allows additional time for MACT standards compliance.

The Pulp and Paper Cluster Rule was promulgated in April 1998. Compliance options available in the rule were part of the XL project for Weyerhaeuser Flint River Plant in Oglethorpe, Georgia. Specifically, the Water Effluent Limitations Guidelines and Standards portion of the rule requires more stringent reductions for toxic pollutants in the wastewater discharges during the bleaching process and in the final discharge from the mill. As part of its XL commitment and its Minimum Impact Manufacturing strategy underway at the plant, Weyerhaeuser has conducted a feasibility study of plant-wide effluent reductions through innovative technologies. The Effluent Guidelines Voluntary Advanced Technology Incentives Program, a

compliance option incorporated into the Cluster Rule, encourages bleach plant operators to install advanced technologies or make process changes that will reduce effluent discharges beyond the rule's limits. Weyerhaeuser's Flint River facility is participating in this program, but expects to exceed the requirements for this option. If a pulp and paper mill enrolls in this program and can meet the strict discharge limits through advanced technologies, the facility receives reduced monitoring and inspection opportunities, and additional time to comply with the air (e.g., NESHAP) portion of the Rule.

Condensate vent stream reductions

Pulp and Paper Cluster Rule.—Testing alternative compliance approaches for HAPs; developing a HAP emissions balance scheme for process vent controls.

Voluntarily reducing hazardous air emissions from process water streams is another compliance option for kraft-pulping operations that was incorporated under the Pulp and Paper Cluster Rule. The Clean Condensate Alternative Program focuses on reducing the hazardous air pollutant (HAP) emissions throughout the pulp mill by reducing the HAP mass in process water streams. The Weyerhaeuser Flint River Facility expects to exceed the requirements to comply with this option since they are going through a mill modernization program that will reduce condensate vent streams throughout the facility. The Flint River facility's willingness to redesign the mill with this option in mind was instrumental in creating this opportunity within the Cluster Rule requirements. By lowering the HAP mass loading in waste water streams, fewer HAPs will be volatized to the atmosphere. Many of the pollutants that are ultimately emitted from production vents originate in the mill condensates that are recycled throughout the mill. If a mill can reduce these condensates instead of controlling individual specified vents, they achieve greater air emission reductions and reduce their compliance costs.

Modification of the NESHAP for Magnetic Tape Manufacturing Operations

The revised Magnetic Tape rule was effective in June 1999 and is expected to increase compliance with this regulation, enhance flexibility for affected entities and save companies money in compliance costs.

The 3M (Hutchinson, Minnesota) XL proposal did not reach final agreement. However, one of the flexibilities 3M had requested was used in revising the 1994 Magnetic Tape Manufacturing operations maximum achievable control technology (MACT) standard. Since the 1994 rule was issued, 3M provided EPA with data showing that HAP emissions from uncontrolled solvent storage tanks are very close (by volume) to HAP emissions from uncontrolled containers of mix preparation equipment. By balancing emissions from these uncontrolled sources against controlled sources in the process line, 3M was able to suggest alternative control options. EPA accepted 3M and other industrial data, and proceeded to amend the 1994 rule providing owners/operators with 25 options for "undercontrolling" tanks and/or mix equipment vessels based on the level of control they achieve on their coating lines. 3M developed this data in conjunction with a regulatory flexibility proposal submitted to Project XL.

Using pollution prevention technologies

The Pulp and Paper Cluster Rule also provides incentives for using pollution prevention technologies in kraft pulping operations. The MACT standards provide for an extension of up to eight years from promulgation for compliance if pollution prevention approaches that otherwise would not have been used are used.

Pulp and paper facilities will have the flexibility to demonstrate HAP emission reductions using innovative pollution prevention approaches in lieu of, or in addition to, end of pipe HAP controls. This extension is designed to encourage mills to install pollution prevention technology that will reduce HAP emissions from the pulping process, as well as both air and water pollutant discharges from the bleaching process. The Weyerhaeuser XL project will demonstrate pollution prevention approaches to reducing HAP emissions such as: reducing process condensate wash water HAP content; reducing bleach plant HAP emissions, and reducing oxygen delignification HAP emissions; and reducing cylinder mould decker and filtrate tank HAP emissions.

Limited Preapproval for Air Permits

The recent Pharmaceutical MACT standard regulations promulgated in September 1998 have incorporated lessons learned from the Merck final project agreement, allowing the limited preapproval of certain types of production changes without requiring permit revision for each modification.

Certain industries change their product lines and manufacturing processes frequently. Usually, such changes require a time-consuming preconstruction permit re-

view and approval process prior to implementation. By focusing on the total emissions of its facility, the Merck XL project is testing the use flexible air emission strategies under a facility-wide emission cap to allow modifications that would no longer require prior approval under either Federal or state NSR regulations. The Agency is formally considering further expanding this use of preapproval and "cap permits" as part of a wider application of these concepts in forthcoming NSR regulatory standards.

EPA Institutional Change:

Compliance Screening for XL's Voluntary Project Sponsors

EPA issued the "Guidance for Compliance Screening for Voluntary Programs," the Agency's comprehensive screening framework, applicable to all voluntary partnership programs.

EPA actively encourages a wide variety of public and private entities to participate in XL, but all sponsors must have a solid history of compliance with EPA regulations. While past record of compliance is not always an indicator of future performance, a potential sponsor's overall compliance history is relevant to ensure the experimental XL approach will not pose undue risks to human health and the environment. Initially, XL project eligibility was determined through an EPA Office of Enforcement and Compliance (OECA) enforcement screen. As the XL process matured, compliance screening became more frequent and time-intensive. The screening process was also not well defined. To standardize compliance screening, OECA developed the Guidance for Compliance Screening for Project XL. This guidance specifies the scope, criteria and process for conducting enforcement screens, and indicates that compliance screens will be updated prior to high-visibility public events. XL has laid the groundwork for testing and establishing guidance for an increasing number of EPA voluntary programs requiring compliance screening. In addition to the XL screening guidelines, the Guidance for Compliance Screening for Voluntary Programs (August 1998) provides the comprehensive screening framework for all of the Agency's voluntary partnership programs.

Senior Management Support and Involvement through the Reinvention Action Council

EPA established the Reinvention Action Council (RAC) to further senior management involvement in advancing innovative efforts. The RAC's success in resolving problems in Project XL led to expanded responsibilities for the Council.

For projects to succeed and system change to occur, there is a need for active support from senior Agency management. For XL, this support includes championing projects, empowering staff, giving clear direction to teams and providing resources. In 1996, EPA established the RAC to assist in reaching the Agency's goal of 50 XL projects. The RAC consists of senior Agency managers (Deputy Assistant Administrators and Deputy Regional Administrators) from each of the Headquarters and Regional offices. Originally, the RAC served as a resource to XL teams to resolve disagreements or difficult technical and policy issues. Since then, RAC members have committed to working directly with XL Coordinators within their offices to support quick decision-making and ensure that XL teams have suitable resources. Involving senior managers has proven to be effective in identifying and resolving problems for XL. In 1997, the Administrator expanded the RAC's responsibilities to support the Agency's overall commitment to reinventing environmental protection. To date, the RAC has taken a hard look at reinvention efforts throughout the Agency and has addressed a broad array of reinvention issues including incentives, permitting and environmental management systems, and continues to set new reinvention priorities.

Developing Capabilities to Conduct Experiments with State and Tribal Governments

The ECOS–EPA Innovations agreement, developed out of the XL experience, defines seven principles to guide innovations and a process that clarifies how EPA and the states will put innovations to the test. The prominent role of states in the XL process, along with the Innovations agreement, has advanced successful Federal-state partnerships in developing and managing innovation strategies for environmental protection.

Federal sharing of environmental responsibilities requires that each XL project have the support of the appropriate state or tribal government. For most projects, state and tribal governments are signatories. State and tribal governments are, and will continue to be, primary partners with EPA in both regulating human health and the environment, and designing innovative approaches. It is incumbent that EPA, states and tribal governments rectify any differences and produce agreements

that satisfy each entity. XL serves as testing ground for such a framework. The promise of more efficient and effective government has led several states to develop their own XL-like legislation to test innovative approaches to state environmental programs. To provide an additional vehicle, EPA and the Environmental Council of the States (ECOS) negotiated The ECOS–EPA Innovations agreement to guide innovations in the future. Project XL continues to influence states as they consider and develop their own programs.

Some Examples of Future Change:

In addition, below are two examples of innovations that EPA plans to incorporate into permanent regulatory changes in 2000.

Clean Air Act Emission Caps

In the near future, The Agency will announce the New Source Review Reform and Clean Air Act revisions. The approaches tested in the following three XL projects have provided fundamental information about the value and structure of flexible air permits that has been incorporated into these rules.

Three XL projects—Intel-Chandler, Weyerhaeuser-Flint River, and Merck-Elkton—are testing different versions of a facility-wide air emissions cap. The benefit of these caps is that they reduce and limit each facility's air emissions and allow them flexibility as to how to control or prevent future emissions to maintain these reduction levels. As long as the facilities operate within the cap limits, it also allows the facilities to make production changes without recurring permit modifications. Intel established its site-specific emissions cap as part of its minor New Source Review (NSR) Permit with Arizona and EPA. Intel is using a Plant Site Emission Limit (PSEL) for criteria pollutants and an Arizona Ambient Air Quality Guideline limit for HAPs to establish their facility caps. Intel has reduced its criteria emissions and hazardous air pollutants (HAPs) by more than 20 percent and 40 percent, respectively, below its earlier actual emissions baseline. Weyerhaeuser has modified its existing air quality permit (with Georgia and EPA) with a dual emissions cap for the two major sources of criteria air emissions at their facility and Merck has created its emissions cap as part of a new Prevention of Significant Deterioration (PSD) permit with Virginia and EPA. These projects are testing and confirming the potential for establishing caps that not only provide for the opportunity to reduce air emissions below allowable levels, but offer the flexibility to facilities to control or prevent emissions from exceeding these levels. These project flexibilities have been studied as part of a wider application of these concepts in forthcoming NSR regulatory standards.

Pretreatment Mass-based Compliance Standard

The mass-based approach used in the Steele County XL project is helping to inform the national pretreatment regulations streamlining process.

National Pretreatment Standards establish limits on pollutants in specific industrial categories, establishing pollutant limitations in different ways for different categories. Current regulations do not allow alternative mass-based limits to be developed when concentration-based limits are required. This can serve as a hurdle for industrial users that are attempting to minimize their water use. Water conservation efforts can increase the concentration of pollutants in a reduced volume of water even if the total mass of pollutants have decreased. Complying with a mass limit that is equivalent to or less than the total pollutant load from a concentration limit would not change and could even reduce total pollutant loading, even though effluent concentration might increase. In a rule proposed in July 1999, EPA seeks to streamline the general pretreatment regulations for existing and new sources of pollution. The proposed rule allows the Steele County (MN) Project XL sponsor facilities in Owatonna and Blooming Prairie the flexibility to use alternative mass-based limits. To enable and facilitate water conservation strategies, the local Control Authority can allow sponsor facilities in Owatonna to use equivalent mass limits in lieu of concentration limits for discharges to the wastewater treatment facility.

ENDOCRINE DISRUPTOR SCREENING PROGRAM: SCHEDULE FOR VALIDATION AND STANDARDIZATION

Question. What is EPA's schedule for completing the validation and standardization of the screens and tests in the proposed Endocrine Disruptor Screening and Program? Will the validation work for both screens and the corresponding tests for human health be completed at the same time? When will the test(s) for human health be validated for use?

Answer. The scientific screens and tests proposed for the Endocrine Disruptor Screening Program vary considerably in terms of their readiness for routine use in

regulatory programs. Because many of the endocrine disruptor screens and tests involve cutting-edge science, few of them have actually undergone the standardization and validation requirements necessary for pesticide and chemical regulation. Many of the tests proposed for the screening program have been used in research, but have never been formally standardized or validated through inter-laboratory comparisons. Standardization and validation is essential to establish the relevance, reliability, and reproducibility of methods. Therefore, EPA will validate all test systems to ensure that the tests are reliable and reproducible before implementing the testing phase of the program.

EPA formed a technical committee called the Endocrine Disruptor Standardization and Validation Task Force to provide the technical advice needed to develop, standardize, and validate the screens and tests proposed for the Endocrine Disruptor Screening Program. EPA is currently reconstituting the Task Force as an advisory committee under the Federal Advisory Committee Act. Although the Task Force's activities have been temporarily suspended, this does not affect the progress of the technical work, which is ongoing. EPA expects the advisory committee to resume its technical advisory functions in late Fall 2000.

Several years will be required to complete standardization and validation of the entire Tier 1 Screening and Tier 2 Testing batteries. However, EPA is moving as quickly as possible and anticipates implementing the screening program in phases, with initial emphasis on the legislatively mandated components of the Tier 1 Screening battery. Several screening tests have already entered the validation process, and we expect all the Tier 1 screens and one of the Tier 2 tests to be validated by 2003. The four remaining ecological tests require substantial development. One will be validated by 2003, two by 2004, and the last by 2005.

The standardization and validation process is being conducted using the general principles developed by the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM), as described in Validation and Regulatory Acceptance of Toxicological Test Methods (NIEHS 1997). However, there are also Senator Bond separate international standardization and validation efforts being conducted by the Organization for Economic Cooperation and Development (OECD). As these future tests are developed, EPA will examine their suitability for use and possible replacement of tests currently proposed for use in the screening and testing batteries.

The validation work for screens and tests relevant to human health will be completed by 2003.

ENDOCRINE DISRUPTOR SCREENING PROGRAM: PROCEDURAL RULE

Question. Is the Agency planning to propose a procedural rule for the EDSP?

Answer. Yes, the Agency is planning the development of a procedural rule for the Endocrine Disruptor Screening Program. The procedural rule will be proposed by 2002 and finalized before screening is required in 2003. The procedural rule will be detailed guidance on various aspects of policy for implementing the screening program. Included in this rule will be guidance on:

—the process the agency will use follow in setting priorities and ordering or issuing rules to require testing;
—who should pay for testing and how costs should be divided;
—the justification that must be made for skipping Tier 1 screening;
—the process to be followed to obtain an exemption or waiver from the testing requirements of screening programs; and
—the procedure for submitting data.

NATIONAL AIR TOXICS ASSESSMENTS: PUBLIC INVOLVEMENT

Question. My understanding is that the Agency has an ambitious project underway to develop a national air toxics assessment tool that will allow the Agency to characterize the potential health risks associated with exposure to air toxics. According to EPA's most recent schedule, next month (April 2000) you plan on a public release of a 1996 emissions inventory and modeled air quality results for every county in the country. Then in August 2000, you plan on a public release on the internet of exposure modeling results and estimates of the public's cumulative risk from 33 of the most prevalent air toxics in the country. How have you involved the public in building this tool?

Answer. Our National Air Toxics Assessments (NATA) build off of previous modeling and analysis, the Cumulative Exposure Project (CEP), which estimated ambient concentrations of air toxics for 1990. We worked with various stakeholder groups on the CEP, including state and local governments, environmental groups, and industry representatives. In updating this effort with 1996 data and expanding

our assessments to include exposure modeling, we have continued to involve the public and specific stakeholders. The main mechanism we have used to date for getting public input in the development of the National Air Toxics Screening Assessment (which includes both ambient and exposure modeling) has been through two public meetings in October 1999 in Washington, D.C., and continued updates through electronic mail with the participants of those meetings. At these meetings, we described in detail our plans for a national screening level assessment of air toxics risks and solicited input on example presentation formats for the results of the assessment. Participants, including people from state, city, and county offices, environmental groups, trade press, industry, and environmental justice representatives, provided recommendations on presentation formats as well as the assessment in general. We are actively involved with state and local air agencies in conducting reviews throughout the process. We have received additional input—written and through additional meetings with stakeholders—on various aspects of our assessments. Also, to inform the general public of our activities, we provide a description of our NATA activities on the EPA website.

NATIONAL AIR TOXICS ASSESSMENTS: REVIEW AND COMMENT

Question. Has the general public been able to review and comment on all specific elements of the NATA, including the emissions inventory, the proposed nation-wide application of the air dispersion model and exposure models, the IRIS values to be used, and the development of the microenvironment?

Answer. Plans for the NATA 1996 national-scale assessment were discussed at two public meetings held in Washington, DC in October 1999. As discussed at those meetings, the modeling approaches being used as part of the assessment are a mixture of previously peer-reviewed approaches and relatively new science which is undergoing peer review during the assessment process. We incorporated comments from these meetings on the analytical approaches being used and the methods being proposed to communicate the results into the assessment and the final documentation will reflect these changes.

The national-scale emissions inventory (the 1996 National Toxic Inventory) which drives the modeling process is largely a product of peer involvement. To develop this inventory, technical staff in the state and local air pollution agencies work together with EPA staff to pull together the best available information on air emissions of all the hazardous air pollutants (HAPs) for the year 1996. The methods for measuring, estimating, and calculating these emissions are all individual subjects of peer review, but the full inventory itself is not. This is consistent with the development of emissions inventories for all the criteria pollutants.

The air dispersion model being used for the assessment, the Assessment System for Population Exposure Nationwide (ASPEN), has been publicly peer-reviewed by the EPA's Science Advisory Board in the context of its use in the Cumulative Exposure Project. While the peer review identified some shortcomings of the model, it is still recognized as the most useful tool for this type of national-scale assessment for air toxics.

The air pathway exposure model, the Hazardous Air Pollutant Exposure Model (HAPEM4), has been previously subject to peer review in the context of its use for estimating exposures from mobile source pollutants. We have modified it from previous versions to account for the partitioning of the 33 urban HAPs between typical outdoor monitoring sites to indoor locations and multiple microenvironments. These modifications are currently undergoing internal and external peer review prior to their use in the assessment.

The cumulative risk approach (which uses IRIS values, among others) that we are using for the assessment is consistent with previously peer-reviewed Agency risk characterization methods. In addition, since this is a national-scale assessment, the approach is currently undergoing internal and external peer review, as is the overall assessment approach of integrating these various modeling results together for the full quantification of inhalation risks. Further, once the national-scale assessment results are completed, the entire assessment approach, the results, and the interpretation of those results will be documented and subjected to a full public peer review by the EPA's Science Advisory Board in the fall of 2000.

Throughout the process, EPA is sharing interim results with state and local agencies in an effort to ensure the quality and consistent interpretation of the results.

PEER REVIEW AND RELEASE OF NATA RESULTS

Question. Is it true that you plan to submit the NATA model and results for peer review at the same time the results will be available to the general public on the

Agency's web site? What is the reason for placing this information on the web before the NATA inputs, model and results have been subject to peer review?

Answer. It is the practice of the Science Advisory Board (SAB) that any technical product being peer reviewed by the SAB be made available to the public for inspection and review. To facilitate public access for such documents, the SAB asks that the Agency post them on the EPA web site. All products placed on the web site are marked as a "SAB Review Draft," making clear that they are not final Agency documents.

USING NATA TO MEASURE PROGRESS

Question. According to your budget justification, one of the stated purposes of NATA is to assist the Agency in determining the effectiveness of the nation's air toxics programs. Will NATA be used to measure EPA's progress toward meeting the statutory goal of a 75 percent reduction in cancer incidence, considering all emission reductions from stationary sources?

Answer. Yes, National Air Toxics Assessment (NATA) activities will be used to help us track progress toward meeting our overall national air toxics program goals, which include the statutory goal of a 75 percent reduction in cancer incidence attributable to hazardous air pollutants emitted by stationary sources. This is because NATA activities include such efforts as expanding air toxics monitoring; improving and periodically updating emissions inventories; periodically conducting national- and local-scale air quality, multimedia and exposure modeling; and characterizing risks associated with air toxics exposures. Specifically, we plan to use the results of both the current and future national screening assessments of air toxics, as well as monitoring and other data generated from the NATA activities to measure progress toward meeting the 75 percent reduction requirement.

CONTAMINATED SEDIMENTS: NAS WORKGROUP PROGRESS

Question. The National Academy of Sciences is developing a decision framework for evaluating ways to remediate sediments contaminated with PCBs. The NAS is looking at the efficacy and risks of remedial alternatives to provide a scientific basis for selecting remedies at these sites. The NAS expects to complete its report by October of this year. At the same time, EPA's Contaminated Aquatic Sediment Remedial Guidance Workgroup is developing guidance on essentially the same thing, although it is looking beyond PCBs. How far has the workgroup progressed in developing its guidance?

Answer. We plan to circulate a draft Superfund Contaminated Sediment Remedial Guidance (SCSRG) later this year. If the NAS study is released as expected, in October 2000, the recommendation of the NAS would help to shape revision of the draft guidance. The development of the SCSRG draft started before we realized that there would be another NAS study on contaminated sediments. We believe that EPA's guidance development effort is responsive to recommendations in the last NAS report and constitutes an important element in clarifying our approach to assessing contaminated sediments.

CONTAMINATED SEDIMENTS: AGENCY USE OF NAS FINDINGS

Question. Rather than developing the guidance in advance of the NAS report, wouldn't it be better to base the guidance on the report's findings? Once the report is issued, how will the findings be incorporated into EPA policy?

Answer. While EPA has made several presentations before the NAS committee and provided extensive materials for their information, EPA does not know what recommendations will come from the Committee. The NAS recommendations may require further work before they can be implemented as an agency policy. However, if the current study is released as expected in October 2000, the recommendations in this report would help to shape revision of our draft guidance. This NAS study will be the third NAS report on the management of contaminated sediment since 1989. We have reviewed the recommendations of the previously released NAS sediment reports to prepare materials for the guidance that we are currently drafting. We look forward to the final NAS report and intend to give it full consideration in the development (and if necessary, revision) of our Agency's sediment remediation guidance.

INFORMATION BURDEN: AGENCY CLAIMS TO SMALL BUSINESS COMMITTEE

Question. Why did staff of the Office of Environmental Information make these misleading claims to my staff on the Senate Small Business Committee?

Answer. The Office of Environmental Information staff did not intentionally make misleading claims to your staff on the Senate Small Business Committee. EPA believes that the General Accounting Office's (GAO) review underscores the complexity involved in communicating burden reduction. The annual Information Collection Budget (ICB) is the official accounting of agencies' information collection requirements. Under OMB's Office of Information and Regulatory Affairs burden measurement procedures, both program changes (e.g., the addition or elimination of a question on a form) and program adjustments (e.g., revisions of previous burden estimates such as the number of respondents) are used to estimate the burden associated with an Agency's information collections and both are reflected in the year-end estimates published in the ICB.

GAO found that EPA's estimate for hours of burden reduced, as reported in "Reinventing Environmental Protection" is misleading because it represents the sum of program change decreases and program adjustment decreases. We believe this finding does not represent the full range of burden reduction activities that EPA has pursued. EPA has acted aggressively to discuss reducing burden through a variety of activities that tend to make it easier for companies to comply with environmental regulations. EPA is not able to quantify the level of burden associated with these activities. They include: the establishment of compliance assistance centers; development of electronic reporting opportunities; creation of audit policy and regulatory compliance options; implementation of plain language regulations and guidance; and development of electronic tools such as TRIME (Toxic Release Inventory Made Easy) that help make our regulations and guidance more understandable and easier for the public to deal with. GAO's recent report on burden states that these efforts were outside the scope of their review of the agency's information collection requirements.

INFORMATION BURDEN: AGENCY CLAIMS TO HOUSE APPROPRIATIONS COMMITTEE

Question. Why, when GAO shared its findings of misleading EPA claims of burden reduction in February, 2000, did Administrator Browner repeat the same misleading claims to the House Appropriations Committee, Subcommittee on VA, HUD, and Independent Agencies in March, 2000?

Answer. EPA did not intentionally make misleading claims to the House Appropriations Committee, Subcommittee on VA, HUD, and Independent Agencies in March, 2000. The $800 million estimate for cost savings due to burden reductions is a straightforward estimate of the cost of a reporter's hourly time ($30.00 per hour) and the estimated hours of gross annual burden reduction (approximately 26.9 million hours). As we have previously stated , GAO's review underscores the complexities involved in communicating burden and burden reduction. We will work with GAO and OMB to address these complexities and the specific issues raised by GAO about EPA's application of OMB's guidance. We also believe that GAO's review is too narrowly focused and fails to fully acknowledge the Agency's burden reduction efforts. EPA has acted aggressively to discuss reducing burden through a variety of activities.

INFORMATION BURDEN: BUSINESS SAVINGS

Question. Why does EPA claim its efforts saved business over $800 million dollars when GAO found that EPA's "math errors, erroneous assumptions, and conversion of burden hours to dollars on a form that the agency submits to OMB have no effect on businesses' or communities' paperwork requirements or their expenditures."

Answer. The $807 million dollar figure was derived by multiplying the 26.9 million hour burden reduction estimate claimed by EPA and reported in the Information Collection Budget by $30 per hour, an estimate of the cost of an employee's time for a company reporting to EPA. We intend to meet with GAO to ensure our understanding of their criticisms and concerns.

BURDEN REDUCTION: DISCHARGE MONITORING PROGRAM

Question. EPA's largest claimed paperwork burden reduction between fiscal years 1995 and 1998 of 4.7 million hours came from Office of Water (OW) program changes to the discharge monitoring program. But the 4.7 million hour reduction, according to OW, was a goal and a significantly less burden reduction was actually achieved. Why did EPA take credit for this reduction goal and not the actual reduction achieved?

Answer. The President's Regulatory Reinvention Initiative for the Environmental Protection Agency (EPA) established an interim goal of reducing reporting and monitoring burden by at least 25 percent. In response, in April 1996, EPA issued AInterim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies. This document provides guidance to EPA permit writers and States on

how best to implement EPA's National Pollutant Elimination Discharge System (NPDES) regulations regarding appropriate monitoring requirements in permits. The ICR Amendment incorporating this guidance was approved by OMB in 1996. It was based on EPA's estimate that a 26 percent reduction in burden from previous levels for monitoring and reporting requirements would result from the implementation of the guidance. The document is not a regulation and cannot impose legally binding requirements on EPA, States, or the regulated community. It may not apply to a particular situation based upon the circumstances. Eligibility for reduced reporting frequencies depends on meeting specific criteria regarding facility enforcement history and parameter compliance and performance history. Some States establish their own baseline monitoring frequencies. The reduction reported in the ICR was EPA's best estimate of what could be achieved; EPA plans to reevaluate this estimate by examining actual implementation of the guidance as part of the process to renew the ICR in 2001.

BURDEN REDUCTION: DISCHARGE MONITORING PROGRAM ACTUAL REDUCTIONS

Question. How many paperwork burden hours were actually reduced between fiscal years 1995 and 1998 by OW changes to the discharge monitoring program?

Answer. EPA has no existing mechanism for collecting actual burden hours from permitees. However, there is data in EPA's Permit Compliance System (PCS) database for approximately one third of all NPDES permits regarding monitoring frequency. For fiscal year 1995 through fiscal year 1998, the percent of PCS reported permits reissued with reduced monitoring frequencies was 26 percent. The percent of parameters with reduced monitoring frequencies for those permits reported in PCS was 4 percent. The average monitoring reduction per reissued parameter with reduced monitoring frequency was 70.5 percent. For the average facility which reduced its monitoring frequency, this would mean that monitoring for these parameters would be reduced from once a week to once per month.

INFORMATION BURDEN: REINVENTION EFFORTS VS. NATURAL MATURATION OF PROGRAMS

Question. Four of EPA's largest claimed burden hour reductions occurred as a result of the natural maturation of the programs. EPA took credit for 5.2 million hours of reductions associated with Air Operating Permits, Agricultural Worker Protection Standards, OPA Facility Response Plans and Data Generation for Registration Activities. Why did EPA claim these reductions were due to its reinvention efforts when they actually resulted from completion of initial labor-intensive or start-up phases already part of each program?

Answer. The reinvention claims included both program changes and program adjustments. Program maturation, where a requirement is phased out over time, is considered a "Program Change" because burden is no longer imposed on the public after some period of time.

INFORMATION BURDEN: REINVENTION EFFORTS VS. REESTIMATION

Question. Another four of EPA's largest claimed burden reductions, each claimed to produce over 500,000 hours of savings, came as a result of EPA reestimating their initial burden hour estimates. In the case of conformity of federal actions to state implementation plans, the reestimation corrected an earlier collection error. Why did EPA claim these reductions were due to its reinvention efforts when they actually came from reestimates or corrections of errors?

Answer. Three of the four reductions were correctly calculated using the most recent OMB guidance on reestimates and "adjustments." The reduction claimed in the case of conformity of federal actions to state implementation plans was a correction to a previous error and should not have been included in the reduction total. We will inform OMB of this mistake and request that the ICB be amended.

INFORMATION BURDEN: REINVENTION EFFORTS VS. ECONOMIC CHANGES/INDUSTRY ACTIVITIES

Question. While two of EPA's largest claimed burden hour reductions concerning the underground storage tank program reported on actual reductions to the public, these reductions came as a result of changes in the economy or industry's own development of new less burdensome technologies. Why did EPA claim these reductions were due to its reinvention efforts when they actually came from changes in the economy or industry's own activities?

Answer. The reinvention claims included both program changes and program adjustments. These readjustments reflect reductions in the amount of paperwork burden borne by the affected public.

BURDEN REDUCTION: COMPLIANCE ASSISTANCE CENTERS CONTRIBUTIONS

Question. How many hours of paperwork burden did the compliance assistance centers reduce in fiscal year 1999?

Answer. The compliance assistance centers (Centers) have not evaluated the correlation between Center use and any net changes associated with the paperwork burden. Rather, Centers measurement activities have focused on: (1) Internet site activity; (2) user satisfaction of Center services; (3) behavioral changes associated with Center use; and (4) environmental improvements associated with Center use.

Businesses and local governments are using the Centers as a source of regulatory compliance assistance. In fact, the Centers' website experienced over 260,000 visits in 1999. Furthermore, the Centers' Website received over 890 visits on a daily basis in December 1999. More importantly, recent survey data demonstrate that Center users find the Centers very useful—and use improves environmental performance. Based on eight voluntary Internet surveys, over 70 percent of the company and local government respondents said they took one or more actions (e.g.,changing the handling of waste, obtaining a permit, changing a production process, contacting a regulatory agency) as a result of Center use; where applicable, over 50 percent of these companies and local governments felt that they had a cost savings resulting from these actions. Furthermore, over 58 percent of company and local government respondents stated that they realized one or more environmental improvements as a result of using a Center (e.g. reduced air emissions, conserved water). Lastly, the survey responses demonstrate a high degree of satisfaction with Center services—in fact, 85 percent of the survey respondents rated the compliance assistance provided as either very useful or useful.

An additional study conducted by the Coordinating Committee for Automotive Repair (CAR) further demonstrates the Centers' success. In 1997 and 1999, the CAR conducted a survey of automotive service and repair shops throughout the United States. The results of the study show that the automotive industry made significant strides in their environmental compliance program between 1997 and 1999. In 1997, the study concluded that 25.9 percent of the shops reported that they cannot judge compliance from self-reported survey were at least 80 percent compliant with federal environmental requirements. Tin 1999, 55.8 percent of the shops reported that they were at least 80 percent complaint. The CAR study also demonstrated a significant increase in the regulated community's awareness of CAR and the CAR-run compliance assistance center, CAR-Greening®.

BURDEN REDUCTION: EFFECT OF COMPLIANCE ASSISTANCE CENTERS ON BURDEN

Question. If part of the goal of the compliance assistance centers is to educate the regulated community on their environmental obligations and help them meet those obligations, including completing paperwork and other reporting requirements, wouldn't the centers actually help increase paperwork burden?

Answer. The paper-work burden is established through the rule-making process and the regulated community is obligated to comply with those reporting and record-keeping requirements. Therefore, in no way can the compliance assistance centers (Centers) alter reporting and recording keeping requirements associated with environmental requirements. However, the Centers can help the regulated community more efficiently meet their environmental requirements. Through plain-language guides, assistance lines, training events, compliance fact sheets, etc., Center users can more efficiently understand and meet their regulatory obligations. Furthermore, the Centers provide pollution prevention tips and ideas, that may create opportunities for Center users to decrease their regulatory obligations and associated paperwork. For example, the Printers' National Environmental Assistance Center's Listserv helped a client replace a solvent used for a specialized screen printing application with a nontoxic vegetable-based alternative cleaner. Not only did this behavioral change result in an environmental improvement, but the activity is no longer subject to Resource Conservation and Recovery Act hazardous waste management and disposal regulations—and associated paperwork requirements. Lastly, voluntary Internet survey responses indicate that the Centers are in fact helping their users realize cost savings as a result, in whole or in part, of Center use.

BURDEN REDUCTION: EFFECT OF AUDIT POLICY

Question. How many hours of paperwork burden did EPA's audit policy reduce in fiscal year 1999?

Answer. EPA believes that it is generally more cost-effective for companies to resolve violations under the audit policy when compared to more traditional enforcement, but has no practical basis for estimating hours of paperwork either created or reduced by the audit policy.

BURDEN REDUCTION: AUDIT POLICY REDUCTIONS

Question. If the goal of EPA's audit policy is to provide an incentive to meet paperwork and reporting requirements, and EPA experience has shown that the majority of those taking advantage of the audit policy did so regarding potential violations of paperwork or reporting violations, doesn't the audit policy actually help increase paperwork burden?

Answer. EPA's audit policy is designed to encourage voluntary compliance with all federal statutes, including those that provide for the monitoring and reporting of pollution. Monitoring data is the key to determining compliance with emission standards, and reporting requirements provide the public with information about releases from nearby facilities. Violating these important requirements is certainly one way to reduce "paperwork burden," but EPA believes there are more effective and legal means to accomplish this goal that do not undermine federal law or put law abiding businesses at a disadvantage.

INFORMATION BURDEN: EFFECT OF INTEGRATED INFORMATION INITIATIVE (I-3)

Question. EPA has indicated that its Integrated Information Initiative (I–3) will reduce paperwork burden. Does the Agency plan to remove current reporting requirements when it implements I–3?

Answer. The I–3 will result in an information network that will establish a fundamentally new approach to integrating and managing environmental information. While EPA anticipates that I–3 will reduce burden and transaction costs for states, tribes, regulated businesses, and the general public, it is too early to discuss plans for removing current reporting requirements. As I–3 evolves, EPA is committed to look for opportunities to streamline and reduce burden as appropriate and will consider including components to I–3 that will facilitate those opportunities.

INFORMATION BURDEN: STEPS TO ENSURE ACCURACY OF ESTIMATES

Question. What steps will EPA take to correct its future paperwork burden hour estimates, set straight the record of misleading statements before the Congress and ensure the Agency does not take credit improperly for burden hour reductions?

Answer. EPA would like to meet with GAO to ensure that EPA understands the findings in the recent GAO report on the agency's burden reduction efforts. The purpose of this meeting will be to clarify burden reduction tabulations and statements, make changes where necessary and establish a process that will avoid similar findings in the future.

REINVENTING ENVIRONMENTAL INFORMATION MILESTONES

Question. For each milestone phase which EPA failed or expects to fail to reach by the planned date, provide a brief description for the delay or failure, any actions, strategies or efforts to achieve missed milestones or avert missing of milestones the Agency expects to miss.

Answer. From 1997 to 1999, EPA met all of the REI milestones and commitments stated in its REI Action Plan. During this period, REI project progress was tracked and reported through quarterly progress reports and project status meetings. In 1999, integrated work plans replaced quarterly reporting. These work plans integrated the various REI projects to reflect ongoing activities and milestones and deliverables across projects. The integrated work plans also showed the interdependencies and potential shared resources of the REI projects.

In fiscal year 2000, the Agency expanded the goals of REI by launching an effort that would leapfrog REI by working in close partnership with the states to build and support a national network of shared, integrated environmental information. The main components of REI—data standards, electronic reporting and state partnerships—are now the key components of this new effort. In organizing the integration effort, the Agency realized the critical need to step up our joint work with the states. We have increased our collaboration efforts through the Information Management Work Group of the Environmental Council of the States. We have also chartered, with the states and Tribes, a Data Standards Council to set priorities for and

ensure implementation of data standards. This new integration effort, and our greater partnership with the states, will require us to re-examine our future REI milestones to ensure that we represent the correct milestones for this broader initiative.

REINVENTING ENVIRONMENTAL INFORMATION NATIONAL SYSTEMS REQUIRING REENGINEERING

Question. Identify the national systems the Agency has reengineered, is currently reengineering, or will reengineer before the Agency promulgates REI standards/protocols and estimate the cost in time and resources necessary to retrofit those systems to address completed REI standards/protocols.

Answer. Through EPA's Reinventing Environmental Information (REI) data standards process, EPA committed the 13 major national program systems (tagged the "REI" systems) to incorporate the six REI data standards by fiscal year 2003. The target date was purposely set this far out to allow programs to incorporate the six data standards during their next system enhancement effort. Combining the incorporation of the data standards with the revision of the data structures during system enhancement would avoid any direct costs associated with implementing the standards in the systems. Consequently, there were no studies conducted on the specific cost of implementation. The six data standards include: Facility Identification; Chemical Identification; Biological Identification; Industrial Classification Code; Latitude/Longitude; and Date. The 13 "REI" systems are:

—Permit Compliance System (PCS)
—National Compliance Data Base (NCDB)
—OECA Docket (Docket)
—RCRA Information System (RCRIS)
—Aerometric Information Retrieval System/Air Quality Subsystem (AQS)
—Aerometric Information Retrieval System/Facility Subsystem (AFS)
—Biennial Reporting System (BRS)
—CAA 112(r) Risk Management Plan Information System (RMP*INFO)
—CERCLA Information System (CERCLIS 3)
—Safe Drinking Water Information System (SDWIS)
—Toxic Release Inventory (TRI)
—Water Quality Information System (STORET)
—Envirofacts Data Warehouse (Envirofacts)

REINVENTING ENVIRONMENTAL INFORMATION: ASSESSMENT AND CURRENT EFFORTS FOR DATA QUALITY IMPROVEMENT

Question. Provide the results of the REI assessment of current efforts to ensure the quality of environmental data through error correction, the options paper developed through REI for a comprehensive data program, and the status of any efforts to implement a more comprehensive data quality improvement program.

Answer. The options paper for a comprehensive data quality improvement program is provided as attachment 1, and is formally titled "Data Quality Strategic Plan", dated December 1998. The document was approved by the Agency in April 1999. EPA's strategy to address data quality encompasses four components: data standards, electronic reporting, State partnership, and error correction. These goals are articulated in OEI's Action Plan for fiscal year 2000, and the status of current efforts is provided below.

Data Standards

Data standards is a key piece of enhancing data quality. By September 2000, the Office of Environmental Information expects to complete the following data standards and associated business rules to implement the standards:

—Date
—Standard Industrial Classification/North American Industrial Classification
—Facility
—Chemical
—Biological/Taxonomical
—Latitude/Longitude

To facilitate the development, adoption, and implementation of additional data standards, the State/EPA Information Management Workgroup chartered the Environmental Data Standards Council in November, 1999. The Council's principle mission is: "to promote the efficient sharing of environmental information between EPA, States, Tribes and other parties through the development of data standards." The Council, made up of State, tribal and EPA representatives, is committed to the development and adoption of data standards for environmental information exchange.

The Council has begun to identify and prioritize the next set of data standards to be developed and implemented. We expect to be able to finalize this list within the next two months

The One Stop program, a partnership program with 25 states, began in March 1995 as an effort to develop more efficient methods of providing meaningful environmental information. Through grants to state agencies, this program examined opportunities to reduce the reporting burden on industry, states and local governments, and to foster geographic and multi-media approaches to environmental problem-solving by increased integration of environmental data at the state level.

Integrated Error Correction Process

This Spring, OEI will implement a web-based error correction function. The goal of the error correction process is to provide an improved mechanism for data reporters and users to report errors they have been identified in our public data systems, and institute a management and accounting system. We will begin with those systems that reside in the Envirofacts data warehouse, and expect to have the error correction process implemented for these systems by the Fall of 2000.

Central Receiving

Another tool for enhancing data quality is central receiving. Central receiving will provide a centralized source for receipt and processing of data submitted to the Agency. We are beginning by establishing a limited production infrastructure to accommodate electronic reporting, including Electronic Data Interchange and other web-based data transmission formats. Electronic reporting supports data quality by providing error prevention measures through validation and edit routines that can be run at the point of data receipt. Data which do not pass these routines can be sent back to the submitter for correction before the data are accepted and loaded into a data system. At full implementation, central receiving will have the capability and capacity to receive and process data submitted in any media (paper and multiple electronic formats). We will begin implementation in fiscal year 2000 by receiving small sets of data for several EPA programs.

REINVENTING ENVIRONMENTAL INFORMATION

SUBCOMMITTEE RECOMMENDATIONS AND ESC IRM APPEALS

Question. Describe any early warnings by the REI Subcommittee of projects experiencing difficulties, significant policy and technical issues REI has identified for resolution, and any REI Subcommittee recommendations accepted by the Chief Information Officer but appealed by an Executive Steering Committee for Information Resources Management (ESC for IRM) principal to the entire ESC for IRM and the outcome of the appeal.

Answer. A strong project management program was in place to monitor the progress of REI. Comprehensive work plans, monthly program management meetings, regular work plan updates, and quarterly REI Subcommittee meetings were held to insure REI projects were being designed in support of the Agency's mission, in a timely manner, and within budget. Key policy issues were raised and addressed by the REI Subcommittee, which was chaired by the CIO. These included policy discussions about the approach to the Chemical Identification data standard, Facility Identification Registration, and Central Receiving. No appeal of REI outcomes or decisions were ever made to the CIO by a member of the ESC for IRM.

REINVENTING ENVIRONMENTAL INFORMATION: QUARTERLY REPORTS

Question. Provide the quarterly reports of each responsible party to the National REI Manager on the status of the policy work, efforts to incorporate REI standards into the national systems and to identify any issues requiring attention.

Answer. The fiscal year 1998 quarterly reports are provided as attachment 2, which is formally titled "Reinventing Environmental Information Quarterly Progress Reports for fiscal year 1998." In fiscal year 1999, a decision was made to produce integrated workplans, in lieu of quarterly reports. The integrated workplans reflected all on-going activities and status of each activity. All components of the REI initiative were incorporated into the core mission of the Office of Environmental Information when it was created in October 1999.

REINVENTING ENVIRONMENTAL INFORMATION 1999–2001 FUNDING

Question. Describe, by NPM, Goal, Objective, Sub-objective, Key Program, Office, and Activity, the level of resources including dollars and FTE devoted to REI efforts in fiscal year 1998, proposed in the fiscal year 1999 budget request, included in the

fiscal year 1999 operating plan, spent in fiscal year 1999, proposed in the fiscal year 2000 budget request, proposed in the fiscal year 2000 Operating Plan and proposed in the fiscal year 2001 budget request.

Answer. The attached table identifies this information from fiscal year 1998 through the fiscal year 2000 budget request. While some of the major milestones of the Agency's REI initiative were completed in fiscal year 1999, the remaining REI commitments, such as data standards and electronic reporting, have now been incorporated in the broader OEI program plan.

REI Efforts*

Fiscal Year	NPM	Objective	Sub-objective	Key Program	Office	Activity	Dollars (in thousands)	FTE
1998 Spent	OARM	Increase Quality/ Quantity of Education, Outreach, Data Availability	Public Access Strategy	Public Access	OIRM	Reinventing Environmental Regulations	$15,648.6	3.0
		Ability of Public to reduce Exposure	Provide Information to the Community About Local Environment	Public Access	OIRM	Community Based Environmental Protection	$2,750.0	0.0
1999 Budget Request	OARM	Increase Quality/ Quantity of Education, Outreach, Data Availability	Public Access Strategy	Public Access	OIRM	Reinventing Environmental Regulations	$15,650.0	3.0
		Ability of Public to reduce Exposure	Provide Information to the Community About Local Environment	Public Access	OIRM	Community Based Environmental Protection	$2,500.0	0.0
1999 Operating Plan	OARM	Increase Quality/ Quantity of Education, Outreach, Data Availability	Public Access Strategy	Public Access	OIRM	Reinventing Environmental Regulations	$12,349.8	3.0
		Ability of Public to reduce Exposure	Provide Information to the Community About Local Environment	Public Access	OIRM	Community Based Environmental Protection	$2,500.0	0.0

Fiscal Year	NPM	Objective	Sub-objective	Key Program	Office	Activity	Dollars (in thousands)	FTE
1999 Spent	OARM	Increase Quality/ Quantity of Education, Outreach, Data Availability	Public Access Strategy	Public Access	OIRM	Reinventing Environmental Regulations	$12,349.8	3.0
		Ability of Public to reduce Exposure	Provide Information to the Community About Local Environment	Public Access	OIRM	Community Based Environmental Protection	$2,500.0	0.0
2000 Budget Request	OARM	Increase Quality/ Quantity of Education, Outreach, Data Availability	Public Access Strategy	Public Access	OIRM	Reinventing Environmental Regulations	$17,441.5	3.0
		Ability of Public to reduce Exposure	Provide Information to the Community About Local Environment	Public Access	OIRM	Community Based Environmental Protection	$4,878.9	0.0

* All resources located in Goal 7 - Expansion of Americans' Right-to-Know About Their Environment

REINVENTING ENVIRONMENTAL INFORMATION—EXPLANATION FOR REDUCTIONS TO FUNDING

Question. For any REI activities which decreased from any budget request to its operating plan, or from operating plan levels to the following year's budget request, provide a brief explanation for the reduction.

Answer. The REI activity entitled Reinventing Environmental Regulations took a reduction in its fiscal year 1999 operating plan from the fiscal year 1999 budget request level. This decrease reflected the REI initiative's share of the Agency's overall reduction to its fiscal year 1999 budget request. As a general rule, given the importance of REI, we always tried to limit cuts to the program as much as possible.

REINVENTING ENVIRONMENTAL INFORMATION PERFORMANCE MEASURES

Question. Identify and describe the GPRA or Agency performance measures in fiscal year 1999 and fiscal year 2000 which incorporate REI commitments?

Answer. The Agency uses three Annual Performance Goals/Performance Measures in fiscal year 1999 and fiscal year 2000 to describe its REI commitments. These are:

—Making a greater percentage of data reported to EPA available to the public through Electronic Data Interchange/Electronic Commerce;

—Streamlining and improving the information reporting processed between state partners and EPA by increasing the number of state participants in the One Stop Reporting Program; and

—Increasing facility identification (ID) data accuracy by establishing a National Facility ID file.

REINVENTING ENVIRONMENTAL INFORMATION

Question. Describe the degree to which REI has brought, to date, reduced confusion caused by multiple methods of representing the same information, and when and how much further reductions are anticipated to occur.

Answer. REI is a five year plan (1998–2003) and implementation of data standards in Agency information systems is just beginning. The initial focus on data standards was to get a number of them established. Four of the six are now final and the last two will be finished this fiscal year. The focus is now moving to enabling and accelerating implementation of the standards in Agency data systems. Implementation will encompass a compliance element—requiring written documenta-

tion from agency programs on their actions to implement data standards, a communication and outreach component to make sure system developers and system managers understand what they are being asked to do, and a technical assistance component alleviating the initial system retrofitting that will be required for at least two of the standards.

REINVENTING ENVIRONMENTAL INFORMATION

Question. Describe the degree, in terms of burden-hours, to which REI has directly reduced paper reporting, errors, time delays, and associated costs its first year and when and how much further reductions are anticipated to occur.

Answer. Burden hour reductions have not been quantified at this early stage since the effort thus far has been to establish an infrastructure. REI focuses on incorporating data standards and electronic reporting into thirteen of EPA's national information systems. Promulgation of all necessary standards, policies, and protocols are projected to occur by the end of fiscal year 2001. As each new data and reporting standard becomes ready for implementation, each national system is projected to incorporate it by the end of fiscal year 2003 either through retrofitting existing systems or including the standard in system reengineering efforts.

COMPLIANCE ASSISTANCE FORUM: AGENDA AND PARTICIPANTS

Question. Provide a description of the compliance assistance forum the Agency held in Atlanta in March including: list of participants, the agenda, and a brief description of the contents of each of the programs, meetings or breakout sections.

Answer. The Forum 2000—Building Compliance Assistance Partnerships was held in Atlanta, Georgia on March 1 and 2, 2000. The Forum was intended to provide an opportunity for compliance assistance providers to share information on compliance assistance needs and strategies, and to offer feedback on the Compliance Assistance Clearinghouse and the first EPA Annual Compliance Assistance Activity Plan. Discussions were also held to address several overarching issues such as integrating compliance assistance with enforcement, and developing a set of criteria to use in prioritizing compliance assistance needs. The Forum was also designed to foster a compliance assistance provider network.

The attached materials include the final Forum agenda, a list of speakers and breakout session topics, and the meeting summary, which includes a list of attendees. These materials are also posted on the web at www.seattle.battelle.org/epa-icaa.

OPPTS ASSISTANCE PROVIDERS—FOLLOW-UP

Question. Provide the results of Agency efforts to prepare and finalize recommendations and make assignments for implementing the OPPTS assistance providers national meeting results. If EPA has not completed this milestone, provide the status of the efforts and estimate of completion date.

Answer. On December 6–7, 1999, the EPA, along with the National Institute for Standards and Technology (NIST) and the U.S. Small Business Administration (SBA), hosted a national meeting in Dallas, Texas, of both state and federally-funded environmental and business assistance providers, in part as a response to the Senate Small Business Committee's April 1998 hearing on "Environmental Compliance Tools for Small Business." While the primary focus of that Senate hearing was on EPA's small-business compliance assistance programs, the larger goal, as articulated by Chairman Bond in his opening remarks, was to "address the various approaches to compliance assistance in the context of what is working for small business."

Several EPA programs, including its Offices of Prevention, Pesticides and Toxic Substances; Enforcement and Compliance Assurance; Policy, Economics and Innovation; and Air and Radiation, had begun coordinating about this time to develop more effective and efficient assistance delivery to the nation's small businesses and, along with other EPA offices, to inculcate sound environmental performance as part of standard good practices within the business culture. The Dallas meeting, a commitment in the Agency's *Aiming for Excellence* report of July 1999, has enhanced partnerships within the EPA and among the Federal agencies. It has also promoted the federal "wholesale" approach for compliance and technical assistance which utilizes other delivery agents which are closer to the customer and can sometimes better frame environmental approaches in a broader business context.

In terms of implementing some of the key commitments made in the Dallas meeting:

—NIST agreed to develop and maintain a dedicated list-server to facilitate a continuation of the dialogue among the interested parties that was begun at the

meeting. This was accomplished and is now being used to identify and discuss ideas.

—The providers agreed to work together to develop specific proposals for consideration by the Federal sponsors: EPA, SBA and NIST. One such draft proposal, a multi-state pilot effort with national support capabilities led by a number of Small Business Development Centers (SBDCs), was first mentioned at the Dallas meeting. Work is currently underway to formalize relationships and build support among the participating provider organizations on this proposal, which could be complete as early as late May 2000.

—The Federal sponsors agreed to host providers who wished to present specific proposals that had gained support from the larger assistance community. The sponsors could host such a meeting in late Spring 2000, depending upon the progress of the SBDC or other proposals—although an agreement to host a session on a specific proposal does not imply Federal support for it.

A longer summary of the Dallas meeting is available on EPA's web site at www.epa.gov/p2.

This national network effort is also being coordinated with a number of EPA projects, led by the EPA Office of Enforcement and Compliance Assurance, to improve the Agency's general compliance assistance activities.

ASSESSMENT OF SMALL BUSINESS ASSISTANCE SERVICES: CATALOG

Question. If the Agency has not done so already, provide the catalog of small business related services and products intended to developed as part of the Aiming for Excellence initiative by November 1999. If EPA has not completed this milestone, provide the stats of the effort, reason for delay, and an estimate of completion date.

Answer. Development of the catalog of small business-related services and products is nearly complete. EPA has a number of services and products that are targeted specifically for small businesses and others that apply to broader audiences, yet still may be applicable to small business. We are in the process of finalizing the catalog so that it best reflects this mix of services and products. We anticipate completion in June 2000.

"* * * present specific proposals that had gained support from the larger assistance community. The sponsors could host such a meeting in late Spring 2000, depending upon the progress of the SBDC or other proposals—although an agreement to host a session on a specific proposal does not imply Federal support for it."

A longer summary of the Dallas meeting is available on EPA's web site at www.epa.gov/p2.

This national network effort is also being coordinated with a number of EPA projects, led by the EPA Office of Enforcement and Compliance Assurance, to improve the Agency's general compliance assistance activities.

ASSESSMENT OF SMALL BUSINESS ASSISTANCE SERVICES: SURVEY

Question. Provide a copy of the survey to small business consumers of EPA environmental assistance intended to be developed as part of the Aiming for Excellence initiative by March 2000. If EPA has not completed this milestone, provide the status of the effort and an estimate of completion date.

Answer. As we complete our catalogue of small business products and services, we will refine the set of questions for the survey of small business customers. Because we have been approved for a limited number of hours under our information collection request, we want to be sure that the questions we include in our survey tool will provide us with information that will best reflect the current state of small business satisfaction with our products and services. We anticipate commencing the survey in July 2000.

COMPLIANCE ASSISTANCE CLEARINGHOUSE: STATUS OF EFFORT

Question. Provide the status of efforts as part of the Aiming for Excellence initiative to design and develop a clearinghouse of compliance assistance materials and tools and whether the effort is on target to meet the September 2000 operational deadline.

Answer. The Compliance Assistance Clearinghouse (Clearinghouse) is on target to be fully operational in September 2000.

The goal of the Clearinghouse is to link existing networks of compliance assistance providers, facilitate the finding and the sharing of information, increase quality and speed of delivery of compliance assistance services, and increase the number of clients served. The Clearinghouse is a nationally accessible and searchable Web site that allows compliance assistance providers to link to existing networks to avoid du-

plication, find new tools/information, download existing tools and information, find experts, and exchange new ideas and information.

The Clearinghouse is intended to serve compliance assistance providers, such as Small Business Assistance Programs, technical assistance/pollution prevention providers, state and local governments, trade/professional associations, sector-based compliance assistance centers, EPA, other federal agencies (DOD, DOT, OSHA), and universities. The Clearinghouse will support the tasks that providers perform on a day-to-day basis, such as responding to frequently asked questions and identifying experts.

There are three main components of the clearinghouse. The first is a Providers' Directory, which will help identify providers with expertise in a specific area. The second is a searchable database that will have a user-friendly navigation system. The third component is a communications forum to foster communication among providers.

Throughout the design process, EPA has worked extensively to involve stakeholders in the development. These efforts have included outreach efforts to states, small business assistance providers, and industry compliance assistance providers. In addition, EPA created a multi-stakeholder advisory group, the Compliance Assistance Advisory Committee (CAAC) under the existing Federal Advisory Committee Act chartered National Advisory Council for Environmental Policy and Technology. One of the key activities of the CAAC is to provide input on the Clearinghouse development. The CAAC has been consulted on every aspect of the design and population of the Clearinghouse.

COMPLIANCE ASSISTANCE CLEARINGHOUSE: STAKEHOLDER

Question. Provide a summary of stakeholder input, organized by stakeholder, which EPA obtained at its March 2000 compliance assistance forum on the design of the clearinghouse.

Answer. The comments below, expressed at the March 2000 Forum, reflect different stakeholders' views about the content and the format of the Clearinghouse:

General Services Administration

1. The site needs to be well-connected to other Federal agencies. There is a need for information exchange on Environmental Management Systems. This should include tools for Federal workers—curriculum development, uniform statements of work for contracts, etc. GSA has a list of environmental services vendors that can be made available on-line to Federal Agencies.

Bureau of Land Management

2. Presenting a solution to implementing requirements and then having a link to a vendor who can help with the solution is very important for the user community.

3. The EPA regulatory link is useless. The system needs to mirror OSHA.

State

4. Contacts at the state level need to be at the working level. STAPPA/ALAPCO provides contacts and may be a good model.

5. State regulatory sites need to be linked.

Industry

6. Links to commercial sites would need a disclaimer.

7. You need some way to indicate the quality of the data you post from other sources. Possibly use a ranking system based on comments, etc.

8. To increase the number of providers in the directory you could use the log-in feature to add names to the directory.

9. Data editing of the Clearinghouse information needs to be a faster process to encourage folks to keep the material up to date.

Compliance Assistance Providers

10. Some EPA web sites have had problems with including .com sites. The Agriculture Center in particular has experienced this problem.

11. It is very important to keep the links "live." The three "tier" plan the CAAC has developed would be a good start.

12. Michigan has a pollution prevention (P2) network of providers that could be a good model for the directory.

General

13. Suggest using the "add a link" feature, which will pull in the meta-data tags from the site, thus decreasing the amount of data entry required.

14. When the comment field is used, it is important that the author include their name.

15. Marketing is extremely important for the success of the Clearinghouse. Presentations should be made at conferences. The Compliance Assistance Centers should also participate in the marketing.

COMPLIANCE ASSISTANCE TOOLS DISTRIBUTION: STATUS OF EFFORTS

Question. Provide the status of efforts under Task 5 of Action 4 under the Aiming for Excellence initiative to distribute and market compliance assistance tools to organizations that are likely to have contact with regulated groups.

Answer. The distribution of compliance assistance tools is handled primarily by the office and/or region that has the lead for developing the tool. Under the "Aiming for Excellence" report, the Agency committed to developing tools for economically significant rules. Of the ten rules identified by the Agency, two have been promulgated—the Office of Water's national pollution discharge elimination system stormwater regulation and the Office of Environmental Information's amendment for certain persistent and bioaccumulative toxic substances. The compliance assistance tool for the stormwater regulation has been completed and a plan for distribution is being developed. The tools for the other regulations require additional stakeholder input and should be completed this fall.

During the development of compliance assistance tools, the lead office and/or region developing the tool works with stakeholders interested in the regulation to ensure that the tool will be useful to the targeted audience and the user has access to the tool. Based on stakeholder input a plan is developed to distribute the tool to compliance assistance providers and/or the regulated community. The tool is also distributed to EPA regional counterparts and state contacts.

Tools are generally posted on the web site of the EPA office/region responsible for developing the tool. The tool is also made available through other internet resources such as the Small Business Gateway web site and, when appropriate, the ten industry-specific Compliance Assistance Centers developed by EPA. In many instances, brochures describing the tools and how to access them are developed, and distributed to appropriate stakeholders through mailings and meetings.

The implementation of the Compliance Assistance Clearinghouse will greatly enhance the Agency's efforts to assure that the provider community has easy access, from one central web site, to all compliance assistance tools developed by EPA.

COMPLIANCE ASSISTANCE TOOLS DISTRIBUTION: COORDINATION

Question. Describe how the Agency coordinates between its offices the distribution or marketing of compliance assistance tools.

Answer. The distribution of compliance assistance tools is handled primarily by the EPA program office or Region that has the lead for developing the tool. EPA offices work with other internal Agency staff and the stakeholders interested in the regulation in the development and distribution of compliance assistance tools to ensure that the tool is useful and that potential users have access to the tool. We believe that the Compliance Assistance Clearinghouse will optimize the Agency's ability to coordinate the distribution of materials to all parties that have an interest in them.

COMPLIANCE ASSISTANCE TOOLS DISTRIBUTION: AGENCY COMPLIANCE

Question. Describe how the Agency strategically identifies areas or sectors in need of compliance assistance tools and then distributes tools to meet those needs.

Answer. Currently each EPA program office and region develops individual program plans addressing their respective areas of responsibility. Through its own analyses of environmental and regulatory problems as well as discussions with external stakeholders , other governmental agencies and Congressional agencies and staff, each office sets priorities for the coming fiscal year(s) and then develops strategies and activities to address those priorities. These activities include a range of compliance assistance activities, such as outreach or technical assistance.

The distribution of compliance assistance tools is handled primarily by the office and/or region that has the lead for developing the tool. During the development of compliance assistance tools, the lead office and/or region developing the tool works with stakeholders impacted or interested in the regulation to ensure that the tool will be useful to the targeted audience and the user has access to the tool. Based on stakeholder input a plan is developed to distribute the tool to compliance assistance providers and/or the regulated community. The tool is also distributed to EPA regional counterparts and state contacts.

COMPLIANCE ASSISTANCE TOOLS DISTRIBUTION: MARKETING

Question. Describe how the Agency identifies the need for further marketing of its compliance assistance tools including how EPA assesses the effectiveness of its current marketing activities.

Answer. The Agency utilizes a range of techniques to develop and evaluate marketing approaches. Marketing approach depends on the type of tool developed and the audience for that tool. Generally, EPA continuously works with a wide range of stakeholders such as trade associations, state offices and facilities to ensure that the tool is accessible; and if not, they help us identify opportunities to enhance the tool's distribution to those that do not have access. This provides the Agency with insight into how well our marketing efforts are working and what additional distribution may be needed.

Some specific examples of how the Agency furthers its marketing approach:

—Many projects are put through a pilot process prior to large-scale distribution. The compliance assistance tools are distributed to a limited audience for their use. This distribution is followed by a survey to determine the usefulness and appropriateness of the materials for the targeted audience. This feedback is incorporated in finalizing the materials and the distribution of the documents.

—EPA increasingly utilizes voluntary surveys as a method to get feedback on the tools that are developed. This process has been done extensively with the small business community as well as in other programs. The Agency seeks feedback on the content and appropriateness of the materials for the audience.

—Monitoring of web site and hotline usage provides valuable information on how well the documents are reaching the regulated community. For example, the Compliance Assistance Centers Website activity growth has been quite pronounced. In fact, the Centers experienced over 260,000 visits in 1999, over 890 visits per day on average. Seventy per cent of those who responded to an online survey visit said they visit the site at least monthly while 30 percent visit on a weekly bases.

COMPLIANCE ASSISTANCE TOOLS DISTRIBUTION: SAFE DRINKING WATER MENTORING "KITS"

Question. Describe efforts included under the Aiming for Excellence initiative to develop by January 2000, a "start-up" kit to make it easier for local and tribal governments to participate in safe drinking water mentoring.

Answer. The Safe Drinking Water Peer Review Program (Peer Program) began in 1996 as an effort in Georgia by EPA Region 4, along with local and state partners, to train volunteers from small drinking water systems so these operators could help themselves and other "peer" system operators achieve and remain in compliance with state and Federal drinking water regulations.

Training for the operators volunteering to participate as review team members is based on a modified version of the training for state and Federal inspectors. After completing training conducted by EPA and state regulators, these volunteers are listed in a directory along with areas of expertise so other small system operators can call upon them to conduct evaluations and reviews on site. Along with volunteer training, the other components of the Peer Program include self-assessments conducted by small system operators, and technical assistance and evaluations provided by the trained peer volunteers.

What began as a Georgia pilot has expanded rapidly. Local chapters of national organizations like the American Water Works Association and the Rural Water Association have assisted EPA Region 4 and other state and local partners to develop program implementation customized to the particular state or tribe. The Peer Program has been replicated in Kentucky, Iowa, Virginia, Mississippi and by the United South and Eastern Tribes (USET, representing 23 Indian tribes from Maine to Texas). As a result of "word of mouth" experiences of Peer Program participants, increased Program exposure at regional/national water association meetings, and numerous awards, the demand for creating additional Peer Programs has increased. Region 4 developed a web-based "tool kit" as a way to provide information to interested EPA regions, states and potential partners concerning starting a Peer Program.

The "tool kit" was developed to simplify as much as possible the creation of new state and tribal Peer Programs. It includes a description of the Peer Program, its components and sample forms which can be easily adjusted to recognize differences in varying state requirements. Forms include sample evaluations, a sample training agenda and a sample volunteer directory. Also included is a start-up flow chart which describes the various steps involved in creating the Program, as well as a detailed check list to make it easy for interested persons to develop a Peer Program.

The "tool kit" includes information on existing Programs and provides contacts and information relating to potential partnership opportunities. The "tool kit" is available from Region 4 EPA in a CD ROM format upon request and is also accessible through an EPA website, http://www.epa.gov/region4/peerreview/toolbox.htm.

SAFE DRINKING WATER INFORMATION SYSTEM

Question. Describe the status of efforts to convene by April 2000, representatives from all EPA regions for training on the development and implementation of safe drinking water information programs.

Answer. In September 1998, EPA launched a major review of the quality of data in the Safe Drinking Water Information System/Federal version, or SDWIS/FED. An EPA/stakeholder working group was established for this purpose. A data quality assessment, which included a review of three years of data verification audits covering 27 states, was conducted. Those audits identified significant gaps in the compliance data that states report through SDWIS. Based on this assessment, the working group developed a Data Reliability Action Plan, which sets a data quality goal, identifies activities to establish a quantitative and qualitative data quality baseline, and lists interim actions to improve data quality.

At the end of fiscal year 1999, the intensive data quality review was completed and the EPA/stakeholder workgroup identified priority actions to be implemented, i.e.,

—Conduct more training so states know how to interpret rules and report violations;
—Conduct more frequent data audits so states know not only their specific problems but also appropriate corrective measures;
—Reissue rule guidance to specify how rules may and may not be interpreted.

To implement the first recommendation regarding training, EPA is carrying out the following activities:

—During May 2000, five training courses in Philadelphia, Atlanta, Denver, San Francisco, and Seattle will be offered on implementation of the Lead and Copper Rule. The training will provide instruction on how to report violations to SDWIS/FED.
—EPA has already established a contract mechanism for states to obtain on-site technical assistance to resolve specific, ad hoc data entry problems.
—EPA is developing a generic SDWIS/FED data entry course as well as other rule specific compliance determination/reporting courses like the Lead and Copper Rule course.
—For states that adopt SDWIS/STATE (a state version of SDWIS/FED) as their state drinking water information management system, EPA provides training to state personnel on entering and retrieving data from SDWIS/STATE.

To implement the second recommendation regarding data audits, EPA is carrying out the following activities:

—EPA is planning to increase the frequency of audits of state data from once every three years to once every two years. Senator Bond
—The Agency is revising and clarifying protocols for data verification and self-audits and encouraging states to conduct their own audits on a regular and consistent schedule. This will strengthen overall data quality oversight.

To implement the third recommendation on reissuance of rule guidance, EPA is carrying out the following activities:

—During the data verification audits that have already taken place, the Agency identified issues regarding compliance and implementation inconsistencies and confusion.
—The Agency has worked with the states to develop clear and consistent guidance for these identified compliance and implementation issues, and will publish this in the Water Supply Guidance which is issued annually.

COMPLIANCE ASSISTANCE TOOLS DISTRIBUTION: MENTORING EFFORTS

Question. Describe whether and where these mentoring efforts under the safe drinking water program might serve as a model for other programs around the Agency.

Answer. The concept of utilizing peer review and self assessments to provide compliance assistance to rural communities is easily transferrable to environmental media programs other than drinking water programs. The initial Peer Program focusing on ground water drinking water systems was easily expanded to include surface water drinking water systems. Additionally, wastewater facility peer review programs are being developed in Georgia, and the United South and Eastern Tribes

(USET, representing 23 Indian tribes from Maine to Texas) plan to adopt this component in their program. Solid waste is another potential area for further expansion.

COMPLIANCE ASSISTANCE TOOLS FOR ECONOMICALLY SIGNIFICANT RULES: AIMING FOR EXCELLENCE—IDENTIFICATION OF ECONOMIC RULES

Question. The Aiming for Excellence report called for identification of economically significant rules under development for the purposes of developing compliance assistance tools for these rules. The report called for identification of the rules by June 1999. However, EPA did not release a draft of projected economically significant rules until the November 1999 FACA meeting. What was the reason for missing this milestone?

Answer. In May 1999, during development of the Aiming for Excellence Report, EPA developed a draft list of projected economically significant rules. The list was then reviewed for accuracy and completeness by all of EPA's media program offices, followed by a review conducted by the Agency's regulatory steering committee. The list was then provided to the Compliance Assistance Advisory Committee. EPA met its obligation to produce a timely and accurate list for use by the principal set of stakeholders.

COMPLIANCE ASSISTANCE TOOLS FOR ECONOMICALLY SIGNIFICANT RULES: AIMING FOR EXCELLENCE—FINAL

Question. The Aiming for Excellence report called for finalization by October 1999 of the initial set of rules for which compliance assistance materials will be developed. What was the reason for missing this milestone?

Answer. The list of economically significant rules for which compliance assistance material would be developed was finalized in October, 1999. Simultaneously, EPA established a stakeholder advisory group under the Federal Advisory Committee Act to meet the Agency's commitment (under the Aiming for Excellence Report) to work with stakeholders to identify potential regulations that may need compliance assistance. The advisory group, Compliance Assistance Advisory Committee (CAAC), held their first meeting on November 18–19, 1999. At this meeting, the list of economically significant rules was provided to the CAAC and any other interested stakeholder attending this meeting.

COMPLIANCE ASSISTANCE TOOLS FOR ECONOMICALLY SIGNIFICANT RULES: DRAFT FISCAL YEAR 2001 ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN

Question. The Draft Fiscal Year 2001 Annual Compliance Assistance Activity Plan contains an appendix listing the projected economically significant regulations. Does this represent the finalization of the initial set of rules or was the finalization accomplished with a different vehicle?

Answer. Appendix B of the March 1, 2000 Draft fiscal year 2001 Annual Compliance Assistance Activity Plan contains the complete list of projected economically significant regulations as of that date. The list of these regulations was finalized as described in the previous questions. However, it is possible that rulemakings will be removed or added to the list if there are changes in projected economic impact or the date of issuance for the rules.

COMPLIANCE ASSISTANCE TOOLS FOR ECONOMICALLY SIGNIFICANT RULES

Question. Provide the dollars and FTE each applicable program manager (NPM) has spent in the last three years to develop compliance assistance tools for economically significant rules. In meeting this request, organize the information by rule, NPM, fiscal year, appropriation, goal, objective, sub-objective, office or Region and activity.

Answer. The following provides dollars and FTE spent by the Office of Enforcement and Compliance Assurance (OECA), the Office of Air and Radiation and (OAR) and the Office of Water (OW) on developing compliance assistance tools for economically significant rules in fiscal year 1998, 1999 and 2000. The GPRA goal structure was not in place until fiscal year 1999.

The compliance assistance tools referred to in the OECA table address several activities and environmental requirements related to the specific economically significant rule. The full cost of developing the compliance assistance tool is shown because we are unable to isolate the cost attributable to explanation of the specific rule. Further, OECA supports other on-going sector-oriented compliance assistance mechanisms, notably ten Internet-based Compliance Assistance Centers, which help small and medium sized businesses, local governments and Federal facilities better understand and comply with Federal environmental requirements.

[Dollars in thousands]

Economically Significant Rule	Fiscal years					
	1998		1999		2000	
	FTE	Amount	FTE	Amount	FTE	Amount
NPM: National Enforcement Program (OECA)						
Appropriations: EPM						
Goal 9, Objective 2						
Pulp and Paper: NESHAP and Pulp and Paper Effluent Guidelines—compliance assessment guide	.....	$115	.....	$20	.....	.....
Financial Assurance for Municipal Solid Waste Landfills—Audit Protocol: Resource Recovery and Conservation Act Subtitle D	.....	.....	1.5	$2.5	1.5	$2.5
Land Disposal Restrictions-Phase IV: Treatment Standards for Metal Wastes and Mineral Processing Secondary Materials and Bevill Exclusion Issues—CA tool; training	.....	.....	.....	.....	0.75	$50
Lead-based paint Activities in Target Housing—Compliance guidance; training, checklist	1.0	$50	1.0	.....	1.0	.....
NPDES Comprehensive Storm Water Phase II Regulations—Storm Water Audit Protocol	.....	.....	0.25	$25	0.25	$25
Medical Waste Incinerators—compliance guide/checklist	0.3	$20	0.3	.....	.....	.....
NPM: National Air Program (OAR)						
Appropriations: EPM						
Goal 01, Objective 02						
National Emission Standards for Hazardous Air Pollutants (NESHAP) for Petroleum Refineries, OAR–OAQPS	0.3	$50	.....	.....	.....	.....
NESHAP for Ethylene Oxide Commercial Sterilization and Fumigation Operations, OAR–OAQPS	0.2	$40	.....	.....	.....	.....
NESHAP for Wood Furniture Manufacturing Operations, OAR–OAQPS	0.4	$80	.....	.....	.....	.....
(8) NESHAP for Halogenated Solvents Cleaning, OAR–OAQPS	0.4	$40	.....	.....	.....	.....
(12) Emission Guidelines for Large Municipal Waste Combustors, OAR–OAQPS	1.0	$100	.....	.....	.....	.....
(14) Emission Guidelines for Hospital, Medical, and Infectious Waste Incinerators, OAR–OAQPS	1.0	$100	.....	.....	.....	.....
(2) NESHAP for Off-site Waste Recovery Operations, OAR–OAQPS	.....	.....	0.3	$50	.....	.....
(3) NESHAP for Pulp and Paper Industry, OAR–OAQPS,	.....	.....	1.0	$100	.....	.....
(9) NESHAP for Flexible Polyurethane Foam Production, OAR–OAQPS	.....	.....	0.3	$40	.....	.....
National Volatile Organic Compound Emission Standards for Architectural Coatings, OAR–OAQPS	.....	.....	0.2	$40	.....	.....
National Volatile Organic Compound Emission Standards for Consumer Products, OAR–OAQPS	.....	.....	0.2	$40	.....	.....
Emission Guidelines for Municipal Solid Waste Landfills, OAR–OAQPS	.....	.....	1.0	$100	.....	.....
NESHAP for Pharmaceutical Manufacturing Industry, OAR–OAQPS	.....	.....	.....	.....	2.0	$200
NPM: National Air Program (OAR)						
Appropriations: S&T						
Goal 01, Objective 01						
Tier II Light-Duty Vehicle and Light-Duty Truck Emission Standards and Gasoline Sulfur Standards, OAR–OTAQ	.....	.....	.....	.....	2.0	$171
NPM: National Water Program (OW)						
Appropriations: EPM						
Goal 02, Objective 01						
Interim Enhanced Surface Water Treatment (Promulgated 12/98) and Stage 1 Disinfectant/Disinfection Byproducts (Promulgated 12/98)	1.1	$30	6.5	$200	5.5	$79

[Dollars in thousands]

Economically Significant Rule	Fiscal years					
	1998		1999		2000	
	FTE	Amount	FTE	Amount	FTE	Amount
Radon	.....	.....	1.3	.....	2.8	$41
Ground Water	0.3	.....	2.8	.....	4.3	$40
Arsenic	.....	.....	.....	.....	0.6	$15
Drinking Water Academy [1]	.....	.....	3.3	$300	3.3	$350
Goal 02, Objective 03						
NPDES Comprehensive Storm Water Phase II	.....	.....	.....	.....	0.5	$350
NPDES requirements for Sanitary Sewer Overflows (SSOs)	.....	.....	.....	.....	0.3	$200

[1] In 1999, EPA established the Drinking Water Academy as a long-term training initiative with the primary goal of assisting EPA, states and Indian tribes to build program capability to successfully carry out the requirements of the Safe Drinking Water Act.

COMPLIANCE ASSISTANCE TOOLS FOR ECONOMICALLY SIGNIFICANT RULES—PLANNED FUTURE SPENDING

Question. Provide the dollars and FTE each applicable national program manager (NPM) plans to spend to develop compliance assistance tools for economically significant rules.

Answer. In the "Aiming for Excellence" report, EPA commits to develop compliance assistance information for new economically significant rules generally within 90 days of issuing each rule. The lead for developing this information rests with the office responsible for the rule-making. The following charts from the Office of Air and Radiation (OAR) and the Office of Water (OW) provides data on future spending plans for economically significant rules. The Office of Enforcement Compliance and Assurance will work with the media program offices to determine how best to meet this Agency commitment by assisting in the development of compliance assistance guides and self-audit/inspection checklists. The FTE support necessary from OECA is not known at this time.

[Dollars in thousands]

Economically Significant Rules	Fiscal year 2001	
	FTE	Amount
NPM: National Air Program (OAR)		
Appropriations: EPM		
Goal 01, Objective 02:		
National Emission Standards for Hazardous Air Pollutants (NESHAP) for Automobile and Light-Duty Truck Manufacturing (Surface coating), OAR–OAQPS	0.2	$50
NESHAP for Industrial, Commercial, and Institutional Boilers, OAR–OAQPS	0.2	$50
NESHAP for Chemical Recovery Combustion Sources at Kraft, Sulfite, and Stand Alone Semichemical Pulp Mills, OAR–OAQPS	0.2	$50
NPM: National Air Program (OAR)		
Appropriations: S&T		
Goal 01, Objective 01: Compliance assistance tools to implement the Tier II Light-Duty Vehicle and Light-Duty Truck Emission Standards and Gasoline Sulfur Standards, OAR–OTAQ	1.0	$87
NPM: National Water Program (OW)		
Appropriations: EPM		
Goal 01, Objective 01: Long term Enhanced Surface Water Treatment Rule and Stage 2 Disinfectants/Disinfection Byproducts Rule	6.0	$100
Goal 2, Objective 3:		
NPDES Comprehensive Storm Water Phase II	0.5	$350
NPDES requirements for Sanitary Sewer Overflows (SSOs)	0.8	$450

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: FISCAL YEAR 2001 PLAN

Question. Describe the ways in which the fiscal year 2001 Plan identifies areas where compliance assistance is needed.

Answer. The draft fiscal year 2001 Plan is a comprehensive inventory of the compliance assistance activities proposed by EPA program offices for the upcoming fiscal year. To address various stakeholder needs, this inventory is organized by sector, statute, chemicals/pollutants of concern, geographic focus, target audience and type of compliance activity.

The activities included in the draft fiscal year 2001 Plan reflect decisions made by each program office in the Agency through their own planning and budgeting processes that establishes their offices' compliance assistance priorities (e.g., for new and economically significant regulations). By offering the draft Plan for comment at the March 1 and 2, 2000 Compliance Assistance Forum and through a Federal Register notice, stakeholders can provide their input on where compliance assistance tools or additional emphasis is needed. All comments received will be reviewed by the Agency's Compliance Assistance Advisory Committee established for providing advice on compliance assistance.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: COMPLIANCE ASSISTANCE NEEDS

Question. Describe the methods the fiscal year 2001 Plan categorizes, ranks or otherwise prioritizes compliance assistance needs.

Answer. The draft fiscal year 2001 Plan is an inventory of Agency compliance assistance activities. To address various stakeholder needs, this inventory is organized by sector, statute, chemicals/pollutants of concern, geographic focus, target audience and type of compliance activity. However, the draft plan does not categorize, rank or otherwise prioritize compliance assistance needs. The activities proceed from decisions made through the Agency's planning and budgeting process for fiscal year 2001 and are included in the Agency's budget submission/annual performance plan submitted to Congress in early February. Stakeholder comments will be taken into consideration as the Agency develops its fiscal year 2001 operating plan and its fiscal year 2002 President's budget.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: STRATEGIC ACTION

Question. Describe the ways the fiscal year 2001 Plan proposes strategic actions to meet the compliance assistance needs identified by the fiscal year 2001 Plan.

Answer. The draft fiscal year 2001 plan is an inventory of the Agency's compliance assistance activities. These activities reflect decisions made by EPA program offices during the Agency's planning and budgeting process for fiscal year 2001. Because these assistance activities address priorities developed by EPA and its program offices, the activities are consistent with EPA's strategic directions and meet important compliance assistance needs.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: EPA ORGANIZATIONS

Question. Describe the ways, and on what basis, the fiscal year 2001 Plan identifies the EPA organizations best suited to implement individual parts of the strategy developed to ensure the Agency meets compliance assistance needs identified in the fiscal year 2001 Plan.

Answer. The draft fiscal year 2001 Plan is an inventory of the compliance assistance activities proposed for the upcoming year based on individual EPA program office priorities, as developed through the Agency's planning and budgeting process for fiscal year 2001. The Plan lists the responsible EPA organizations for each activity, and the organizations were selected based on their expertise about specific regulatory requirements.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: RESOURCES

Question. Describe the ways, and on what basis, the fiscal year 2001 Plan directs Agency resources to individual EPA organizations to implement assigned parts of the strategy developed to ensure the Agency meets compliance assistance needs identified in the fiscal year 2001 Plan.

Answer. The fiscal year 2001 Plan lists the organization responsible for implementation of each activity. The responsible organization is best suited to the activity based on program expertise and capacity.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: CRITERIA

Question. Describe the criteria EPA will use to prioritize activities within the Plan among other competing Agency priorities.

Answer. Each program office in the Agency has an individual planning and budgeting process that establishes their offices' priorities. The items in the Plan were submitted by those offices as real compliance assistance needs. These needs will be

weighed against other projects in need of funds and will be funded as resources permit.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: RESOURCE NEEDS

Question. Describe how the resource needs identified in the fiscal year 2001 Plan and future Plans will be incorporated into the Agencies annual resource planning and budget request process.

Answer. Remaining fiscal year 2001 and future resource needs will be identified before or at the onset of the planning and budgeting cycle. For future Plans the Agency will adjust the schedule for seeking stakeholder input to ensure that the feed-back is available prior to the beginning of the planning and budget cycle.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: LEVEL OF FUNDING FOR ACTIVITIES

Question. Describe how, and on what basis, the Agency will decide the level of funding for activities within the Plan during the fiscal year 2001 Operating Plan process.

Answer. The level of funding for individual projects in the Plan will depend on Congress's final determination of Agency appropriations for fiscal year 2001, stakeholder feedback about compliance assistance needs, and projected costs associated with development and delivery of specific compliance assistance activities.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: IDENTIFICATION OF FUTURE COMPLIANCE ASSISTANCE NEEDS

Question. Describe the ways future compliance assistance plans will identify areas where compliance assistance is needed.

Answer. At the completion of the fiscal year 2001 Plan the Agency will evaluate the process used to develop the first plan, determine what improvements might be necessary, and implement those improvements which might help to focus compliance assistance resources where they are most needed. The Agency will work with the Compliance Assistance Advisory Committee and other stakeholders to accomplish this.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: FUTURE PRIORITIZATION METHODS

Question. Describe the methods future compliance assistance plans will categorize, rank or otherwise prioritize compliance assistance needs.

Answer. Currently each Office/Region individually establishes its project priorities. As a result of stakeholder input, EPA and the Compliance Assistance Advisory Committee are working to develop a set of prioritizing criteria related to compliance assistance which each office can incorporate into their planning process.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: FUTURE STRATEGIC ACTIONS

Question. Describe the ways future compliance assistance plans will propose strategic actions to meet the compliance assistance needs identified by future compliance assistance plans.

Answer. At the completion of the fiscal year 2001 Plan the Agency will evaluate the process used to meet the compliance assistance needs and will improve upon the approach. The Agency will work with the Compliance Assistance Advisory Committee and other stakeholders to accomplish this.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: FISCAL YEAR 2001 PLAN

Question. Describe the ways, and on what basis, future compliance assistance plans will identify the EPA organizations best suited to implement individual parts of the strategy developed to ensure the Agency meets compliance assistance needs identified in future compliance assistance plans.

Answer. An internal EPA workgroup will review all proposed projects that could be included in the Plan to determine if there are opportunities for consolidating resources between offices and to learn from previous efforts.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: RESOURCES TO IMPLEMENT ASSIGNED STRATEGY

Question. Describe the ways, and on what basis, future compliance assistance plans will direct agency resources to individual EPA organizations to implement assigned parts of the strategy developed to ensure the Agency meets compliance assistance needs identified in future compliance assistance plans.

Answer. For future Plans the Agency will adjust the schedule for seeking stakeholder input to ensure that the feed-back is available prior to the beginning of the planning and budget cycle. This will provide insight into where resources are most needed.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: FISCAL YEAR 2001 ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN RESOURCES

Question. Provide the dollars and FTE devoted by the Office of Enforcement and Compliance Assurance, Office of Prevention, Pesticides and Toxic Substances, Office of Solid Waste and Emergency Response, Office of Air and Radiation, and Office of Water to compliance assistance activities as defined by the fiscal year 2001 Annual Compliance Assistance Activity Plan. In meeting this request, provide information from the fiscal year 1999 budget request, fiscal year 1999 operating plan, fiscal year 1999 actuals, fiscal year 2000 budget request, proposed fiscal year 2000 operating plan and fiscal year 2001 budget request. Organize the information by NPM, Appropriation, Goal, Objective, Sub-objective, Office or Region, and activity.

Answer. The first annual Compliance Assistance Activity Plan (Plan) is a compilation of all of the compliance assistance activities planned, agency-wide for fiscal year 2001. The activities in the Plan reflect projects that each program office/region is envisioning for fiscal year 2001. These projects were identified as part of the planning and budget development process which began in the spring of 1999 and will be finalized once the Agency receives the fiscal year 2001 appropriations. Given the process of project identification, this first plan establishes a base-line of Agency activity.

The draft Plan is currently undergoing a public review and comment process. Stakeholders have been asked to provide their views on EPA's selection of priorities for the upcoming year. Once the stakeholder comments have been summarized, they will be shared with Agency management. Additionally, the summary will be provided to the Compliance Assistance Advisory Committee (CAAC), the multi-stakeholder group formed by the Agency under the existing National Advisory Council for Environmental Policy and Technology (NACEPT). The CAAC, in reviewing the comments will have the opportunity to develop formal recommendations to be submitted through the NACEPT to the Agency.

These formal recommendations will be considered by the Agency as it develops the fiscal year 2001 operating plan and the fiscal year 2002 President's Request. Thus, at this stage of the Plan development it is difficult to accurately identify specific FTE and dollar levels for the projects identified in the draft Plan.

The dollars and FTE for the Office of Enforcement and Compliance Assurance's compliance assistance program, however, is provided in the answer to question 186.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: STEPS IN SERVICE PROVIDING CHAIN

Question. The Agency has stated that it wished to limit its compliance assistance activities to that of a "wholesaler" in the service providing chain. For each compliance assistance need identified by the Agency, who has the Agency identified will provide the other steps in the chain, such as manufacturing, distributing, marketing or retailing?

Answer. The Agency has stated that it plans to shift to primarily fulfilling a wholesaler role with respect to compliance assistance. There will continue to be various circumstances in which the Agency will continue its direct provider role. Examples of the need for this direct assistance include working with Federal facilities, providing assistance related to Federally-run programs (e.g., CFCs), and providing assistance to facilities in states which have not been delegated program responsibilities.

EPA currently provides only a small part of the compliance assistance that is targeted to the regulated community. State, local and tribal governments, who are EPA's co-regulators, provide the bulk of these efforts. In positioning itself as a wholesaler, EPA is working closely with states and various provider organizations (i.e., Chemical Manufacturers Association, American Forest and Paper Associations, Graphic Arts Technical Foundation, and Silicon Valley Manufacturing Group) to discuss their appropriate roles and responsibilities within a comprehensive, yet flexible system for providing assistance.

ANNUAL COMPLIANCE ASSISTANCE ACTIVITY PLAN: SERVICE DELIVERY ROLE

Question. How has the Agency determined that each of the other identified entities in the compliance assistance providing chain will effectively carry-out its role in service delivery?

Answer. The Agency is currently evaluating how best to move into the wholesaler role where appropriate. It will however be critical that this shift include an evaluation component to assure that the delivery chain is working effectively. The Agency will address this issue as part of the ongoing discussions.

The Agency will rely on providers that have experience and/or capacity to deliver compliance assistance to the appropriate audience in the most efficient and effective way.

FIELD TESTING OF COMPLIANCE ASSISTANCE SOFTWARE TOOLS: APPROPRIATE REGULATIONS

Question. Describe the status of efforts included in the Aiming for Excellence report to identify regulations appropriate for compliance assistance software development.

Answer. The Agency has solicited stakeholder input to determine where software tools are most needed. As a result of this input, the Agency selected the Toxic Release Inventory as a rule for which this type of tool would be beneficial.

TRI–ME (Toxics Release Inventory Made Easy) is an interactive, intelligent, user-friendly software that guides the user through the reporting requirements for Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 and Section 6607 of the Pollution Prevention Act (PPA) of 1990. This software prompts the user for specific information, which the software then uses to determine if the user's facility has satisfied the reporting requirements for Section 313 and, if so, the software aids the user in completing the appropriate reporting forms. The software includes almost all of the existing TRI guidance so that the vast majority of users will not have to consult any other documents to complete their TRI reporting obligation.

FIELD TESTING OF COMPLIANCE ASSISTANCE SOFTWARE TOOLS: STAFF

Question. Describe the status of efforts to identify appropriate staff to support software development.

Answer. The TRI Regulatory Development Branch in the Agency's Office of Environmental Information is presently managing the development of TRI–ME. This involves the oversight of both the information contained in the software (the script development) as well as the actual programming and software development. Contractors who are well-equipped to handle both aspects of this project have been retained.

FIELD TESTING OF COMPLIANCE ASSISTANCE SOFTWARE: SCHEDULE

Question. Describe the status of efforts to establish a schedule for developing and field testing software.

Answer. Script development for TRI–ME began in October 1999 and was finished in January 2000. The conversion of the script to software and the other database management aspects of the software commenced in January 2000 and are due to be completed by mid-May 2000. An abbreviated beta test (including industry participation) for the software will take place in late April 2000. In mid-May 2000 this first version of the TRI–ME software will be distributed to facilities in just three industry sectors subject to Section 313 reporting; chemical distributors, petroleum bulk storage, and foundries. These three industry sectors will be encouraged to use this software for TRI reports due by July 1, 2000 for reporting year 1999. Subsequent versions of TRI–ME will address and be distributed to additional industry sectors subject to the reporting requirements of Section 313 of EPCRA.

FIELD TESTING OF DRAFT REGULATIONS: PARTICIPATION IN FIELD TESTING

Question. Describe the status of efforts included in the Aiming for Excellence report to identify draft regulations and regulated entities to participate in field testing of draft regulations.

Answer. In May, EPA identified draft regulations for field testing which some regulated entities previously had recommended. Participants in the field test may include facilities ranging from municipalities to large electrical facilities.

FIELD TESTING OF DRAFT REGULATIONS: TRIAL APPLICATION

Question. Describe the status of efforts to conduct a simulated trial application with selected regulations.

Answer. In addition to identifying candidate draft regulations for field testing, the Agency is preparing guidance on how the field testing should be conducted. The likely approach would be to ask the regulated entities that volunteer to be part of the

project to read and comply with the draft regulations using only the proposed rule and preamble for guidance. We anticipate that EPA and company staff would work cooperatively to gain insights into real-world compliance issues.

FIELD TESTING OF DRAFT REGULATIONS: REGULATIONS TO BE USED FOR TESTING

Question. Which regulations has EPA chosen for field testing and which regulated entities have agreed to participate in this testing?

Answer. The Agency will determine which entities may participate in the field testing pilot after the draft regulations have been identified.

Question. When will it occur?

Answer. We plan to begin implementation of the field test by late July or early August.

FIELD TESTING OF DRAFT REGULATIONS: RESULTS OF DRAFT RULE

Question. How, and on what basis, will EPA evaluate the results of its trial application of a draft rule?

Answer. The Agency will include an evaluation requirement in its guidance for the simulated trial application. Once the Agency identifies draft proposed rules for field testing, we will develop an evaluation plan specific to each draft rule.

STRATEGIC USE OF COMPLIANCE ASSISTANCE, INCENTIVES, MONITORING AND ENFORCEMENT ACTIONS: FISCAL YEAR 2000–2001 NATIONAL ENFORCEMENT PRIORITY

Question. Describe the status of efforts included in the Aiming for Excellence Report to develop for strategic use compliance assistance, incentives, monitoring and enforcement actions for each fiscal year 2000–2001 national enforcement priority.

Answer. EPA is committed to expanding the use of integrated strategies that combine compliance assistance, compliance incentive, compliance monitoring, and enforcement activities. Our experiences (e.g., Telecommunications Initiative) have shown that this approach can be very effective in addressing enforcement and compliance assurance program priorities. In fulfilling this commitment, we will continue to pursue new approaches to maximizing environmental compliance (e.g., corporate-wide audit agreements). These efforts provide opportunities to build on our successes in addressing serious environmental problems and to improve compliance with environmental laws.

A draft proposal ("guidelines") which will assist the Agency in fulling this commitment has been developed. EPA will commence implementing the appropriate guidelines this year. Additionally, the appropriate strategies for each fiscal year 2000/2001 priority area will be developed by June 30, 2000. The answer to the following question reviews more concrete actions to integrate the use of incentives, assistance and enforcement in specific initiatives.

STRATEGIC USE OF COMPLIANCE ASSISTANCE, INCENTIVES, MONITORING AND ENFORCEMENT ACTIONS: ACHIEVEMENTS

Question. Describe the past or current EPA efforts to use compliance assistance, incentives, monitoring and enforcement actions strategically to address chosen sectors or priorities. Provide quantitative and qualitative achievements including a differentiation of outcomes with specific environmental improvements versus compliance with paperwork or other reporting requirements.

Answer. Since the reorganization of OECA in 1994, we have put in place the principal building blocks of an integrated enforcement and compliance assurance strategy with encouraging results as described in each of OECA's annual Accomplishments Reports. Your question, however, appears to be more directed to the use of integrated enforcement strategies. Current efforts to use integrated enforcement strategies that combine compliance assistance, incentives, monitoring, and enforcement activities are described briefly in the preceding response. Those efforts build upon our experiences, e.g., national sector strategies and initiatives.

Recent experiences show integrated enforcement efforts are effective in addressing program priorities while maximizing scarce resources:

—"Telecommunications Initiative"—EPA conducted extensive outreach efforts to heighten awareness of potential environmental requirements, including sending letters to 29 companies and approximately 40 trade associations and publishing an article in the trade press. In response to EPA's efforts, telecommunications companies voluntarily disclosed under EPA's Audit Policy and promptly corrected over 2,000 environmental violations occurring at over 600 facilities. The Agency waived over $6 million in gravity based penalties and collected $178,727 representing economic benefit gained from delayed compliance. At the same

time, the Agency has pursued an enforcement action against a company based on a tip that was prompted by the publicity surrounding this initiative. The case settled for more than $600,000, helping to assure voluntary participants that they would not be undercut by competitors who continue to violate the law.

—Region 5 "Mini-Mills Initiative"—Early in fiscal year 1997 EPA Region 5 encouraged 25 small mid-west steel mills ("mini-mills")—part of the iron and steel sector—to conduct self-audits and disclose potential environmental violations. Several "mini-mills" voluntarily disclosed violations which will result in significant environmental benefits. For example, EPA settled an administrative action with Calumet Steel in 1999 that will lead to a reduction of approximately 100 tons per year of particulate matter to the air.

—Other initiatives that reflect our integrated approach to national priorities included a compliance partnership program with the American Petroleum Institute to reduce emissions from petroleum storage tanks, a national audit agreement that provides incentives for pork producers to audit and correct violations of the Clean Water Act and a pilot program in Region 4 that has resulted in widespread auditing by municipalities to identify and eliminate sewer overflows.

In addition, EPA's Office of Compliance (OC) and Office of Regulatory Enforcement (ORE) worked with EPA regions and states to develop and implement sector-based enforcement and compliance activities to enhance the regional commitments for the fiscal year 1998/1999 Memorandum of Agreement (MOA). OECA selected two national priority sectors (petroleum refining, primary nonferrous metals) and four significant sectors (agricultural practices/CAFOs, coal-fired power plants, chemical preparations, iron and steel) for coordinated national sector strategies in fiscal year 1998. The attached sections of the "Enforcement and Compliance Assurance fiscal year 1998 Accomplishments Report" contain detailed qualitative and quantitative information about the activities, accomplishments and strategic approach for each of the six sectors. OECA has achieved significant benefits in terms of protecting the public and the environment through these efforts. Preliminary data indicates we are continuing our successes:

—In fiscal year 2000 EPA settled its first enforcement action with Tampa Electric under EPA's national coal-fired power plants priority for Clean Air Act violations. This action will result in reductions in sulfur dioxide of 60,000 tons per year, and in nitrogen oxide of 60,000 tons per year—the equivalent of taking 2.8 million automobiles off our highways.

—In the petroleum refining sector, EPA concluded a multimedia action against Marathon Ashland Petroleum, LLC in fiscal year 1999 including $12 million to correct violations and $14 million to perform Supplemental Environmental Projects which will reduce air emissions of sulfur dioxide and VOCs, and hydrocarbon leaks into the Mississippi River.

—In the primary nonferrous metals sector, EPA reached a judicial settlement with ASARCO and a subsidiary for multimedia violations in several EPA regions. The 1998 phase of the settlement included a $3.386 million penalty for water and hazardous waste violations; the 1999 settlement included a $5.5 million penalty, Supplemental Environmental Projects projected to cost $14.7 million, and enhancing the Environmental Management System used at all ASARCO facilities.

—The fiscal year 1999 FMC Corporation, Inc. settlement—the largest civil penalty obtained under the Resource Conservation and Recovery Act (RCRA)—led EPA to include minerals processing as a Memorandum of Agreement priority for fiscal year 2000/2001. In addition, FMC Corporation Inc. committed to over a dozen Supplemental Environmental Projects with a capital cost of $63 million, with benefits such as significantly improving air quality by reducing air pollution by approximately 436 tons of particulate matter per year.

EPA has used a sector-based approach—identifying key industry sectors—to provide a broad perspective of the compliance problems facing the sectors and to identify enforcement and compliance tools to address the problems. The factors considered in selecting a sector include: compliance history, Regional and state concerns, size of the sector, and potential environmental and human health risks posed by releases. The national enforcement and compliance goals, objectives, and priorities—including priority sectors—are set forth in the nationally written Memorandum of Agreement (MOA) Guidance document which the regions, States, and OECA's other partners use in planning their annual activities and developing individual Memoranda of Agreement. These priorities ensure consistency of national targeting of environmental compliance issues that pose the greatest potential threat to human health and the environment.

STRATEGIC USE OF COMPLIANCE ASSISTANCE, INCENTIVES, MONITORING AND ENFORCEMENT ACTIONS: VERTICAL SELECTION

Question. Has the strategic use of the entire vertical selection of enforcement and compliance assurance tools (i.e. compliance assistance, incentives, monitoring and enforcement actions) improved the compliance incentives program's relative inability to encourage reporting of environmental violations versus paperwork or other reporting requirements.

Answer. During the past two years, EPA has received voluntary disclosures of release—and degradation types of violations that it had not in the past. For example, we've received disclosures related to wetlands, air treatment technology under the New Source Review and Prevention of Significant Deterioration programs, maintenance of publicly owned treatment works (POTWs), and federal fuel standards. We believe those disclosures result from, in part, the presence of a strong enforcement program. Through such types of disclosures we expect to see additional improvements to human health and the environment. In a single Audit Policy settlement related to the improper use of certain fuels by an airline, EPA expects an elimination of nearly 700 tons of pollutants from the air annually—all the result of a voluntary disclosure. We believe that this is a result of EPA's strong enforcement program, and outreach and education provided through compliance assistance activities, such as workshops and newsletters.

OFFICE OF ENVIRONMENTAL INFORMATION STAFFING FTE CEILING

Question. What is the Full Time Equivalent (FTE) ceiling in the Office of Environmental Information (OEI)?

Answer. The FTE ceiling provided OEI in the fiscal year 2000 Enacted Operating Plan is a total of 544 FTE.

OFFICE OF ENVIRONMENTAL INFORMATION STAFFING LEVEL AT 3/1/2000

Question. At what FTE level was OEI staffed as of March 1, 2000?

Answer. As of March 1, 2000, OEI was staffed at a level of 481 FTE.

ENVIRONMENTAL INFORMATION STAFFING STATUS OF FTES

Question. If OEI was below its FTE ceiling, explain the reason for this situation?

Answer. OEI began its operations early in fiscal year 2000, but was not fully staffed at its inception due to vacant positions which transferred for LAN consolidation, TRI technical support, and new program management functions which hadn't previously existed. Many positions have already been filled, and most of the remaining jobs have active recruitment processes underway. OEI managers are working aggressively to fill all positions. OEI projects that it will have filled all positions in its authorized staffing level at the end of fiscal year 2000. Given the breadth of OEI's portfolio and scope of operations, filling all FTE slots is crucial to OEI being able to fulfill its base mission.

OFFICE OF ENVIRONMENTAL INFORMATION STAFFING

Question. Describe the role OEI played in the development of specific information management activities in the fiscal year 2001 budget request.

Answer. The fiscal year 2001 budget request was submitted to OMB in September 1999. OEI was not formally created until October 1999. However, one of OEI's predecessor organizations, the Office of Information Resources Management, determined the fiscal year 2001 investment review requirements and coordinated and reviewed Agency-wide investment proposals. The results of the OIRM-led review were presented to the Agency's Executive Steering Committee for IRM, which led to the Chief Information Officer's advice to the Chief Financial Officer on funding information proposals.

Question. Did OEI review fiscal year 2001 investment requests from the program offices and recommend or not recommend funding the investments?

Answer. OEI was not officially established until October 1999—after the submission of the 2001 budget request to OMB. However, the Executive Steering Committee for IRM, comprised of Agency senior managers, and supported by the Office of Information Resources Management, reviewed the fiscal year 2001 investment requests submitted by the program offices. Based on the advice of the ESC, the Chief Information Officer recommended investments for funding to the Chief Financial Officer. The ESC advised that additional work was needed on several proposals before investments could move forward.

With the creation of OEI in October 1999, OIRM was incorporated into the OEI structure, and the ESC became the Quality Information Council. Both OEI and the

Quality Information Council will have a role in reviewing and recommending investment proposals from the program offices for the fiscal year 2002 budget process.

Question. Did OEI generate its own fiscal year 2001 investment requests on behalf of program offices or the Agency?

Answer. Since OEI was not officially created until October 1999, it did not generate investment requests on behalf of the program offices as part of the fiscal year 2001 process. However, OEI's predecessor organizations, including both OIRM and OP, submitted investment requests that represented Agencywide information initiatives. In January 2000, OEI also submitted an investment request for the Information Integration Initiative as part of OMB's Exhibit 53.

Question. Did OEI review requests for disinvestments to the fiscal year 2001 budget request?

Answer. EPA's Executive Steering Committee for IRM, comprised of senior Agency managers, and supported by the Office of Information Resources Management, reviewed the fiscal year 2001 investment requests submitted by the program offices, and provided their advice to the Chief Information Officer. Program offices would have identified disinvestments to systems as part of the investment review process.

Question. Describe the role OEI played in developing the fiscal year 2000 Operating Plan, including specific actions on information management funding?

Answer. As OEI was a newly created organization at the time of the fiscal year 2000 Operating Plan development, it concentrated its efforts on sharing its vision of Agency information priorities with members of the Quality Information Council, and on establishing OEI's operating plan and priorities for fiscal year 2000. As part of its work with the Quality Information Council and its vision for the Integrated Information Initiative, EPA program offices are focused on information initiatives that will support integration within EPA and between EPA and the States.

Question. Describe the role OEI played in recommending for or against reductions to the fiscal year 2000 budget request as implemented through the fiscal year 2000 Operating Plan including specific actions across the Agency on information management funding?

Answer. OEI's predecessor organization, the Office of Information Resources Management, served as a staff office to the Executive Steering Committee in reviewing investment proposals for the fiscal year 2000 budget request. Based on the advice of the Executive Steering Committee, the Chief Information Officer advised the Chief Financial Officer of information investments that could be funded in the Operating Plan.

OEI PARTICIPATION IN RESOURCE DECISIONS

Question. How many times did the Quality Information Council meet?

Answer. To jump-start the contributions of senior Agency officials and their participation in the evolving information management agenda, the Acting Deputy Administrator convened EPA's senior officials in an executive forum four times during 1999 prior to the formal chartering of the Quality Information Council (QIC) in the Fall, 1999. Since its formal establishment in September, 1999, the QIC has met seven times to engage in a variety of information management priorities.

HUMAN HEALTH

Question. At what level, in terms of FTE and dollars, did the Agency fund the Human Health Research key program in the fiscal year 1999 budget request, fiscal year 1999 operating plan, fiscal year 1999 actuals, fiscal year 2000 budget request, fiscal year 2000 proposed operating plan, and fiscal year 2001 budget request. Provide the information by NPM, appropriation, goal, objective, office or region, and activity.

Answer. The information follows:

HUMAN HEALTH RESEARCH BUDGET—FISCAL YEAR 1999–2001

[Dollars in millions]

	Fiscal year 1999				Fiscal year 2000				Fiscal year 2001 President's budget	
	President's budget		Enacted		President's budget		Enacted			
	FTE	Total	FTE	Total	FTE	Total	FTE	Total	FTE	Total
S&T:										
Office of Research and Development:										
8.2 Human Health Research [1]	231.9	57.0	225.3	49.7	257.9	55.7	186.6	49.1	176.8	53.4
3.2 Research to Support New Regulatory Requirements Under FQPA	.....	.....	10.4	6.4	16.9	6.6	22.1	8.1	28.0	10.5
4.3 Safe Handling and Use of Commercial Chemicals and Micro [2]	39.3	6.1	28.2	5.1	33.9	4.9	82.1	8.4	79.7	9.1
Superfund:										
Office of Research and Development: 8.2 Human Health Research [3]	3.5	.....	.....	.....	3.5	0.5	.....	.....	.....	.....

[1] Figures reflect the Human Health Objective of the Sound Science Goal [8.2].

[2] Figures reflect the human health portion of Objective 3 of the Safe Communities Goal [4]. They include direct human health research plus a proportion of human health/ecosystems infrastructure [e.g., operating expenses, salaries, travel].

[3] Part of SF transfer S&T for fiscal year 1999 enacted.

HUMAN HEALTH: BUDGET REQUEST

Question. Analysis of the Agency's budget requests indicates that EPA reduced funding to the Human Health Research key program in the fiscal year 1999 operating plan and the fiscal year 2000 proposed operating plan from the higher levels contained in each year's budget request. Why did the Agency make reductions in Human Health Research from each of these budget requests to the following operating plans and what impact did it have on the activity levels of the program?

Answer. Fiscal year 1999 was the first year of formal implementation of the Government Performance and Results Act (GPRA). In implementing the Act's requirements, the Agency realigned its budget into the current goal/objective structure. During development of the enacted operating plan for fiscal year 1999, a review of the placement of certain key programs suggested that human health research directly supporting implementation of the Food Quality Protection Act (FQPA) of 1996 should be realigned from the core human health research program captured under the Sound Science goal (8.2) to Goal 3, which directly supports implementation of the Act.

Similarly, during development of the fiscal year 2000 proposed enacted budget, research directly supporting implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA) was realigned from the Sound Science goal to more directly support the Agency's efforts to improve community safety under Goal 4.

These funding realignments were the major influences on the changes to human health research under Goal 8 for the two years. While these changes did result in reductions to that goal, they did not impact the overall human health research program since they were made only to more clearly associate certain direct research efforts with the related regulatory programs under Goals 3 and 4.

In addition to the realignments mentioned above, there were reductions in fiscal year 1999 as part of the general reduction required to meet Congressionally appropriated levels. The area affected by the general reduction to human health research under Goal 8 was the Science to Achieve Results (STAR) grants program. As a result, the program was able to support 2–3 fewer new grant awards than would have been possible otherwise.

Funding for the total core human health research program under all three goals (3, 4, and 8) was $61.1 million and 263.9 workyears in the fiscal year 1999 operating plan, and $65.6 million and 290.8 workyears in the fiscal year 2000 proposed operating plan.

ENFORCEMENT ACCOMPLISHMENTS: FISCAL YEAR 1998 DECREASE

Question. Describe the extent to which the level of fiscal year 1998 decrease in enforcement activities may be within the natural variation of enforcement activity from year to year.

Answer. For fiscal year 1998, EPA issued 1,721 administrative compliance orders, 1,400 administrative penalty orders, and referred 411 civil cases to the Department of Justice, a total of 3,532 actions for the year. For the previous year, the total for the same categories was 3,557, a difference which was not of concern to EPA after reviewing the detailed data about fiscal year 1998 enforcement activities.

ENFORCEMENT ACCOMPLISHMENT: PERCENTAGE CHANGE FOR DECREASE/INCREASE

Question. At what level or percentage change does the Agency believe a decrease or increase in enforcement activities would be due to elements beyond the natural variation of enforcement activity from year to year?

Answer. It is expected that variations in enforcement outputs will occur due to the fact-specific nature of enforcement. Cases vary in terms of the entity involved, duration of violations, type of entity, litigations facts, and the severity of the violation, just to mention a few. In addition, the year to year enforcement outputs vary naturally as priorities change and the level of resources needed to handle individual activities associated with those priorities change. There are simply too many variables that create the total agency enforcement activities for each year to predict the dominant cause of the variation or a level or percentage change beyond the norm.

ENFORCEMENT ACCOMPLISHMENTS: MEASURE OF RESOURCES BY TIME, FTE AND DOLLARS

Question. How does the Agency measure the amount of resource intensiveness in terms of time, FTE or dollars associated with its enforcement cases including larger, more complex or time intensive cases or actions?

Answer. The Agency does not track the resource intensiveness of individual cases because our goal is to target our resources through our compliance monitoring program at the most significant environmental problems rather than to aim for a certain resource efficiency level for enforcement cases. If our targeting is successful and we address significant environmental problems through enforcement it is often the case that these cases are larger and more complex. OECA does analyze regional civil judicial and administrative outputs as compared to FTE resources on an annual basis so that the relative efficiency between regions can be compared.

ENFORCEMENT ACCOMPLISHMENTS: MEASURE OF ENVIRONMENTAL IMPACT

Question. How does the Agency measure the amount of environmental impact resulting from each of its enforcement actions?

Answer. The environmental impact from enforcement actions is measured by the estimated pollutants reduced from each enforcement case. This information allows the Agency to know the pounds of pollutants reduced as a direct result of single cases or categories of cases. In addition the Agency also measures actions taken by facilities (e.g., change in production process, etc.) as a result of enforcement.

ENFORCEMENT ACCOMPLISHMENTS: ENFORCEMENT ACTIONS VS. ENVIRONMENTAL IMPACT

Question. Has the Agency conducted a comparison of the amount of environmental impact resulting from each of its enforcement actions versus the degree of resource intensiveness of each action? If so, what are the results?

Answer. The Agency does not routinely compile information about the costs of each individual case. Therefore, we do not have the capacity to compare the amount of environmental impact versus resources expended for each enforcement case.

ENFORCEMENT ACCOMPLISHMENTS: COMPLEX CASES

Question. In general, has the agency found that larger, more complex or time intensive cases or actions produce greater relative levels of environmental impact?

Answer. We have found that complex cases can yield greater environmental impacts than the cumulative effects of a group of smaller actions for the same violations. Resolving many types of environmental problems requires complex investigations to find the extent and remedies for the problems. If we do not devote the time and resources to these cases, we would not otherwise be able to achieve the reductions in environmental releases many of our cases have achieved. The cases can yield larger Supplemental Environmental Projects that can achieve environmental benefits that could not be gained in smaller cases. Also, we have been able to use the leverage of combining multiple violations into one case to negotiate settlements with more comprehensive injunctive relief that may result in additional environmental impacts than would otherwise be agreed to by the respondent.

ENFORCEMENT ACCOMPLISHMENTS: EFFORTS TO MEASURE DETERRENT EFFECT

Question. What efforts has the Agency conducted, or is the Agency conducting, to measure the deterrent effect of their enforcement program? Does this include any studies, document reviews, contracts or other inquiries? What are the results?

Answer. The Agency's efforts to measure the deterrent effects of its enforcement program include: (1) the Office of Enforcement and Compliance Assurance's (OECA) Compliance Information Project; (2) OECA's implementation of its National Performance Measures Strategy (NPMS); (3) NPMS Compliance Measurement Cooperative Agreements; (4) an ongoing deterrence measurement project sponsored by EPA's Chief Financial Officer (CFO), (5) The Forum on Deterrence of Environmental Violations and Environmental Crime; and (6) Request for Proposals (RFP): Corporate Environmental Performance and the Effectiveness of Government Interventions. Specifics under each of these actions follows.

Compliance Information Project

The April 1999 Compliance Information Project (CIP) Literature Summaries report developed by OECA's Office of Planning and Policy Analysis (OPPA) contains brief reviews of seventeen pieces of compliance literature, plus appendices referencing over two hundred additional studies on a broad array of deterrence and motivational topics. The function of the CIP was to assemble and distribute these materials for followup use by federal and state compliance officials. Information on the CIP, and the full text of the Literature Summaries report, is posted on the OECA–OPPA website at <http://www.epa/oeca/oppa>.

National Performance Measures Strategy Implementation

The NPMS is a multi-year, high priority effort to identify, design, and implement an enhanced set of performance measures for EPA and the public to use to assess changes in the behavior and compliance status of regulated entities from a full range of enforcement and compliance activities. OECA is in the process of implementing twelve sets of NPMS measures referred to collectively as "the Performance Profile." The Profile consists of eight measures of environmental results caused by enforcement and compliance assurance activities ("outcomes"), plus four measures of program activity ("outputs"). Of the twelve sets in the Profile, three (sets 1, 6, and 7) may prove especially interesting to deterrence researchers. Set 1 requires EPA to determine statistically valid noncompliance rates for five regulated populations in fiscal year 2000. OECA and others will then be positioned to analyze impacts on those rates from government interventions and incentive policies. Sets 6 and 7 require EPA to determine the average duration of time significant violators take to return to compliance, and the percentage of significant violators with recurrent significant noncompliance within a two-year period, respectively. The sets will rely on the information in the databases to track trends in the duration of significant noncompliance (SNC) and recidivism by media program.

Compliance Measurement Cooperative Agreements

In connection with the NPMS, OECA is awarding $1.8 million in cooperative agreement grants to fund a series of Compliance Measurement Cooperative Agreements with states to develop and implement potentially transferable outcome-based performance measures for their own enforcement and compliance assurance programs. Of particular interest to deterrence researchers, among the twelve projects selected for funding, is the Oregon-Department of Environmental Quality (DEQ) effort to document and measure the deterrent impacts of their enforcement activities. Oregon-DEQ intends to assess specific deterrence in its state by comparing data elements such as penalty amounts and recidivism, while qualitatively evaluating general deterrent effects via surveys and interviews with the regulated community. The surveys and interviews undertaken by Oregon will explore, among other things, the effectiveness of government efforts to communicate information on enforcement activities and penalties to the regulated community and the public. EPA hopes the results of the Oregon project will enhance its understanding of the relationship between how threats are communicated and received, the actual (objective) probability/severity of punishment, and subjects' perceptions of how visible or discoverable their noncompliance may be.

Deterrence Measurement Project

EPA's Chief Financial Officer and OECA are jointly sponsoring a project with the Eastern Research Group, Inc. (ERG) to develop a model for determining the impact of inspection and enforcement activity on firm behavior and environmental performance. The study is being led by Louis Nadeau of ERG, the author of *EPA Effectiveness at Reducing the Duration of Plant-Level Noncompliance,* 34 j. ENVTL. ECON. & MGMT. 54 (Sept. 1997). In that study, Nadeau, using data from 175 pulp and paper plants covering 41 reporting quarters from 1979 through 1989, found among other things that noncompliant plants that experienced a larger number of tests and inspections and/or enforcement actions during their periods of non-compliance tended to spend less time in violation. Nadeau determined, among other things, that a 10 percent increase in monitoring activity led to 4 percent or greater reductions in the average length of time facilities remained in noncompliance. The new ongoing ERG study focuses on the behavior of firms in two industrial sectors, petroleum refining and integrated iron and steel. The behavior under review consists of facility-level pollutant loadings regulated under the federal Clean Water Act. For the petroleum refining sector, the pollutants of concern are biological oxygen demand (BOD), total suspended solids (TSS), and ammonia nitrogen. The pollutants of concern for the integrated iron and steel sector are TSS, total zinc, and total lead. In its simplest form, Nadeau's model will test whether enforcement has a discernable effect on environmental quality by impacting the behavior of the regulated community. The goal of the model is to determine the statistical relationship between compliance monitoring and enforcement activities, and measurable environmental outcomes.

Forum on Deterrence of Environmental Violations and Environmental Crime

The Department of Justice's (DOJ) independent research arm, the National Institute of Justice (NIJ), together with DOJ's Environment and Natural Resources Division (ENRD) and OECA, held The Forum on Deterrence of Environmental Violations and Environmental Crime on July 12 and 13, 1999. The group of academic ex-

perts and senior federal, state, and local policy-makers and practitioners invited to the Forum participated in a roundtable discussion of the existing deterrence literature, and worked to generate research ideas and identify potential partners for conducting or sponsoring such research. While the Forum participants, consistent with Federal Advisory Committee Act (FACA) requirements, did not prioritize potential research topics or generate consensus recommendations, EPA considered their viewpoints in developing the RFP discussed in the following paragraph.

Request for Proposals (RFP): Corporate Environmental Performance and the Effectiveness of Government Interventions

On April 10, 2000, EPA published a Request for Proposals (RFP) entitled, "Corporate Environmental Performance and the Effectiveness of Government Interventions." This research solicitation is being sponsored by EPA's Office of Research and Development (ORD)-National Center for Environmental Research (NCER), in cooperation with the U.S. Department of Justice (DOJ)-National Institute of Justice (NIJ). The solicitation opened on April 10, 2000. The closing date for submitting grant proposals is July 24, 2000. The RFP may be accessed electronically at <http://www.epa.gov/ncerqa/rfa/corpp00.html>. Through the RFP, EPA anticipates making up to $1 million available to address priority gaps in our understanding of the relationship between government interventions and the behavior of the regulated community, of which deterrence-related issues are a subset. The projected range for awards is $50,000 to $200,000 per research grant per year for durations of one to three years. Proposed research can be prospective or retrospective, with prospective field experiments, survey research, and multi-investigator projects more likely to justify higher funding levels. The results will be available to assist federal, state, tribal and local governments, industry associations, environmental groups, corporations, and private citizens to allocate their resources in order to achieve the greatest degree of environmental and health protection and improvement as efficiently as possible. EPA is also sponsoring a separate solicitation entitled, "Market Mechanisms and Incentives for Environmental Management (MM&I)" <http://es.epa.gov/ncerqa/rfa/market2000.html>. That RFP, dated November 2, 1999 with a closing date of February 2, 2000, focuses on alternatives or complements to traditional environmental regulation that rely specifically on market forces, financial mechanisms, or other instruments to encourage regulated entities to reduce emissions or improve environmental performance. Examples include pollution fees or taxes, pollution allowance trading, subsidies, and differing liability approaches.

ENFORCEMENT ACCOMPLISHMENTS: ADMINISTRATIVE ACTIONS

Question. According to the fiscal year 1998 Accomplishments Report, EPA initiated 17 percent fewer administrative actions per year from the period fiscal year 1993 to fiscal year 1998 than it did from fiscal year 1989 to fiscal year 1992. What is the reason for this decrease in activity?

Answer. There are two explanations for the decrease in administrative actions. First, states made greater use of administrative actions from fiscal year 1993 to fiscal year 1998, increasing such actions by 58 percent compared to their use in fiscal year 1989 to fiscal year 1992. Thus, states were taking more of the cases that EPA had previously addressed through administrative action. Second, during fiscal year 1993 to fiscal year 1998, EPA was expanding the tools it used to prevent or correct noncompliance to include voluntary self-disclosure cases handled informally and more focused compliance assistance. In addition, EPA has placed more emphasis during fiscal year 1993 to fiscal year 1998 on more complex judicial cases involving significant environmental harm.

ENFORCEMENT ACCOMPLISHMENTS: CIVIL REFERRALS

Question. According to the fiscal year 1998 Accomplishments Report, EPA made 6 percent fewer civil referrals to the Department of Justice per year from the period fiscal year 1993 to the fiscal year 1998 than it did from fiscal year 1989 to fiscal year 1992. What is the reason for this decrease in activity?

Answer. A review of the data from fiscal year 1993 to fiscal year 1998 shows that in 3 of the years during that period, the number of civil referrals was higher than any single year in the fiscal year 1989 to fiscal year 1992 period. For only two years, fiscal year 1995 and fiscal year 1996, were the number of referrals lower than in any single year in the period fiscal year 1989–1992. Further, the total for fiscal year 1999 (403) was also higher than during any year in the fiscal year 1989 to fiscal year 1992 period. Finally, the number of civil referrals in the last three years (fiscal years 1997–1999) have set a three-year consecutive all-time record.

RISK MANAGEMENT: FISCAL YEAR 1999, FISCAL YEAR 2000 AND FISCAL YEAR 2001 FUNDING LEVELS

Question. At what level, in terms of FTE and dollars, did the Agency fund the Risk Management Plans Assistance key program in the fiscal year 1999 budget request, fiscal year 1999 operating plan, fiscal year 1999 actuals, fiscal year 2000 budget request, fiscal year 2000 proposed operating plan, and fiscal year 2001 budget request. Provide the information by NPM, appropriation, goal, objective, sub-objective, office or region, and activity.

Answer. Response provided in the tables below.

[Dollars in thousands]

NPM: OSWER Appro: EPM Goal/Obj/Sub: 050202	Fiscal year 1999					
	Budget request		Op plan		Estimated actuals [1]	
	FTE	Amount	FTE	Amount	FTE	Amount
Risk Management Plans	28.5	$11,870.9	28.5	$7,254.9	28.5	$7,254.9
HQ	10.0	$10,308.8	10.0	$5,692.8	10.0	$5,692.8
Regions	18.5	$1,562.1	18.5	$1,562.1	18.5	$1,562.1

[1] Since RMP activities are not specifically tracked in the Agency accounting system, an estimate was provided for fiscal year 1999 actual obligation.

[Dollars in thousands]

NPM: OSWER Appro: EPM Goal/Obj/S ub: 050202	Fiscal year 2000				Fiscal year 2001	
	Budget request		Op plan		Budget request	
	FTE	Amount	FTE	Amount	FTE	Amount
Risk Management Plans	28.5	$11,804.6	28.6	$7,242.8	28.6	$7,913.5
HQ	10.0	$10,152.9	10.0	$5,727.7	10.0	$6,297.2
Regions	8.5	$1,651.7	18.6	$1,515.1	18.6	$1,616.3

RISK MANAGEMENT: REDUCTIONS IN FISCAL YEAR 1999, FISCAL YEAR 2000 BUDGET REQUESTS

Question. Analysis of the Agency's budget requests indicates that EPA reduced funding to the Risk Management Plans Assistance key program in the fiscal year 1999 operating plan and the fiscal year 2000 proposed operating plan from the higher levels contained in each year's budget request. Why did the Agency make reductions in Risk Management Plans Assistance from each of these budget requests to the following operating plans and what impact did it have on the activity levels of the program?

Answer. The fiscal year 1999 and fiscal year 2000 budgets contained an increase in the risk management planning (RMP) activity to support a $5.6 million grant initiative to encourage states to develop and manage their own RMP programs . The initiative was designed to provide states seed money (for up to two years) to develop their audit and inspection, technical assistance and outreach capabilities. It was also intended to help them establish the funding mechanisms needed to sustain the program. Reductions in the EPM appropriation in both years resulted in EPA removing the funding requested for this effort in order to meet higher priorities.

The impact of the reductions are not immediately visible since the Agency currently has 10 states in the pipeline that have committed to developing programs. To help keep these states on track, we are making a small amount of funding—$300,000—available, as well as providing program support. To promote recruitment, we will emphasize flexibility in how states will be authorized to receive delegation.

Since fiscal year 1999, when implementation of the RMP program began, base resources have been redirected to EPA regions to carry out their responsibility as the implementing agency in lieu of states. Regions continue to work in securing agreements through their technical assistance and outreach activities, however, should regions fail, EPA must be prepared to operate the program long-term for about half of the 56 states and territories.

AUDIT POLICY: FISCAL YEAR 1998 CIVIL REFERRALS TO DOJ ELIGIBLE FOR RELIEF

Question. Many violations of emission or discharge standards are required to be identified by prescribed monitoring and thus violations encountered would not be eligible for relief under the Agency's audit policy and its requirement for voluntary audits. For each statute and section under which EPA made a civil referral to the Department of Justice in fiscal year 1998, identify whether a violation under that section would be eligible for relief under the audit policy and provide a short description of the reason.

Answer. Analysis of whether a certain violation-type is eligible for penalty relief under the Audit Policy varies depending upon several factors, primarily how the circumstances surrounding the violation relate to the nine conditions of the policy. Violation of a statutory requirement may be ineligible under certain circumstances and eligible under others. Therefore, EPA determining whether certain violation types identified in fiscal year 1998 enforcement cases would be eligible for the policy requires consideration of many different hypothetical scenarios. For example:

—How would the violation have been discovered?
—Would discovery of the violation have been required under an existing permit or prior settlement or court order?
—Had a state or local investigation begun?
—Would the discovery have occurred prior to the commencement of EPA's investigation?
—Had notice of a citizen suit been issued?
—Did the company have prior violations that would make the violation at issue a repeat violation?

Without reasonable access to this type of information about the cases, EPA's analysis would be difficult to conduct and would likely provide inaccurate responses.

Attached is a break-down of the various statutes represented in our fiscal year 1998 enforcement cases.

The Audit Policy provides that matters that are the subject of a federal investigation or inspection are not considered independent discoveries and are ineligible for penalty relief. It follows that all cases referred to the Department of Justice would be ineligible.

Violations discovered solely through monitoring that is required by law or through a permit are ineligible—although there could be case-specific circumstances that would warrant treatment of such violations under the policy. The key issue is whether an entity had a pre-existing obligation under statute or permit to look for a violation—i.e., was the discovery of the violation voluntary—not whether an entity had a pre-existing obligation to report to EPA any violations it discovers. Therefore, in the instance of an entity that did not conduct legally required monitoring, a disclosure that involves failure to monitor would be eligible under the policy.

The most prominent federal monitoring requirements are the Clean Water Act's NPDES daily monitoring requirements, as promulgated at 40 CFR 122.41; the Safe Drinking Water Act's Public Water Sewer Systems monitoring requirements, as promulgated at 40 CFR 141; the Resource Conservation and Recovery Act's hazardous waste leak detection monitoring requirements, as promulgated at 40 CFR 265.1063; and the Clean Air Act's Title V operating permit requirements, as promulgated at 40 CFR 70.5.

On September 30, 1999, EPA issued a memorandum to clarify that certain Clean Air Act violations discovered, disclosed and corrected by a company prior to issuance of a Title V permit are potentially eligible for the Audit Policy. That memorandum allows New Source Review (NSR) and Prevention of Significant Deterioration (PSD) violations discovered through extraordinary review of permitting history and meeting conditions 3 through 9 of the Audit Policy to receive penalty relief under the policy.

AUDIT POLICY: FISCAL YEAR 1998 ADMINISTRATIVE PENALTY ORDER AND ADMINISTRATIVE COMPLIANCE ORDER ELIGIBLE FOR RELIEF

Question. For each statute and section under which EPA issued an administrative penalty order or an administrative compliance order in fiscal year 1998, identify whether under that section would be eligible for relief under the audit policy and provide a short description of the reason.

Answer. See BOND 129 answer. Audit policy cases are resolved through three mechanisms: penalty orders; compliance orders; and unilateral determinations (often referred to as notices of determination). Therefore, fiscal year 1998 administrative orders include many of the cases resolved under the Audit Policy, as well as unrelated enforcement cases. We will provide an approximate break-out of the fiscal year 1998 administrative orders in two weeks.

The Audit Policy cases settled in fiscal year 1998 were resolved with the following distribution:

—10 were resolved through an administrative penalty order (these are cases for which only partial (75 percent) credit under the policy was granted or for which an economic benefit was collected).

—4 were resolved through a notice of noncompliance (NON) or notice of violation (NOV) under which no penalty was collected.

—28 were resolved through a unilateral order (Notice of Determination) or Agency letter under which no penalty was collected.

—31 were resolved through the use of administrative orders under which no penalties were collected.

Because of the several ways in which these cases can be resolved, we report audit policy cases collectively without breaking down the cases by settlement types. However, some audit policy cases may have had an ongoing correction or remedy (these would be a subset of the fourth category above) that warranted reporting as a compliance order. The same applies for audit policy cases for which some aspect of penalties were collected (first category above).

AUDIT POLICY: FISCAL YEAR 1998 ADMINISTRATIVE COMPLIANCE ORDER ELIGIBLE FOR RELIEF

Question. For each statute and section under which EPA issued an administrative compliance order in fiscal year 1998, identify whether under that section would be eligible for relief under the audit policy and provide a short description of the reason.

Answer. See BOND 129 answer. Audit policy cases are resolved through three mechanisms: penalty orders; compliance orders; and unilateral determinations (often referred to as notices of determination). Therefore, fiscal year 1998 administrative orders include many of the cases resolved under the Audit Policy, as well as unrelated enforcement cases. We will provide an approximate break-out of the fiscal year 1998 administrative orders in two weeks.

AUDIT POLICY: HUMAN HEALTH OR ENVIRONMENTAL IMPROVEMENTS

Question. EPA is committed to obtaining human health or environmental improvements from concluded environment actions but does not consider violations disclosed under the audit policy to be enforcement actions. So to the audit policy's emphasis on paperwork and record keeping violations, 84 percent of disclosures in the last evaluation, is in contrasts to the enforcement program's goal of 75 percent of concluded actions requiring environmental or human health improvements. Is the goal of the audit policy not to require environmental or human health improvements? If so, why has the Agency structured the policy this way?

Answer. The Audit Policy has proven to be efficient for companies and EPA in resolving record-keeping and reporting violations. Record-keeping and reporting requirements provide the framework for public access to information, the structure for safe handling, and the use and discharge of hazardous substances, and are derived from federal laws enacted by Congress. The failure to submit emergency and chemical inventory forms, e.g., can have tragic consequences, such as the death of firefighters unaware of the presence of hazardous chemicals. As the greatest number of violations tend to involve monitoring and reporting requirements, it is not surprising that the majority of disclosures include violations of this type. EPA has undertaken several efforts over the past year to encourage the disclosure and correction of violations of emission and discharge limits. These include an agreement with a large manufacturer to audit and disclose violations of Clean Air Act permit and emission standards; a compliance partnership agreement to encourage controlling VOC emissions from petroleum storage tanks, an audit agreement with the National Pork Producers Council to reduce or eliminate penalties for disclosure and correction of Clean Water Act violations; 67 municipal audits conducted in response to an initiative from Region 4, which are expected to reduce sanitary sewer overflows by improving maintenance and expanding capacity; and voluntary audits by airlines of compliance with fuel standards.

AUDIT POLICY: VOLUNTARY NATURE VS GOAL OF ENFORCEMENT PROGRAM

Question. The voluntary nature of the audit is cited as a reason the audit policy does not induce more violations of environmental or health standards. If the goal of the enforcement program is to address environmental and human health problems with 75 percent of concluded enforcement actions requiring environmental or human health improvements, why does the Agency conclude the voluntary nature provision which runs counter to the goal of the enforcement program?

Answer. As explained in an answer to a similar question last year, the 75 percent goal applies to traditional enforcement actions, not voluntary disclosure and correction under the audit policy. The Agency's policy was designed to provide an incentive for voluntary actions to identify and correct violations. Violations identified through prescribed monitoring (e.g. daily monitoring reports) are already generally available to federal and state agencies. In addition, EPA believes that guaranteeing amnesty for all violations, regardless of how they are identified would provide an obvious disincentive to conduct good audits.

AUDIT POLICY: QUALITATIVE MEASURE OF SUCCESS

Question. EPA has cited quantitative measures of success for its audit policy such as the number of violations disclosures and corrections generated for facilities. Why does the Agency not measure the success of the Audit Policy in qualitative terms such as meeting the goals of requiring environmental or health improvements?

Answer. EPA reports successes of Audit Policy use in a quantitative measure, consistent with reporting requirements under the Government Performance and Results Act. For some cases, however, EPA is aware of the environmental and health improvements that result from the case. For example, EPA's settlement with American Airlines is expected to eliminate nearly 700 tons of pollutants from the air annually.

Because of the recent significant growth in the Audit Policy program and the Agency's interest in environmental and health improvements, EPA has begun to further develop capabilities for begin tracking such improvements made under the policy.

AUDIT POLICY: PENALTY RELATED CHANGES

Question. EPA considered and approved non-penalty related changes to the Audit policy to encourage additional quantities of disclosures. Why did the Agency not consider penalty related changes to increase the quality of disclosures in terms of meeting the goal of requiring environmental or human health improvements?

Answer. Recovering a violator's economic benefit from noncompliance is a cornerstone of EPA's civil penalty program. In addition, many federal statutes explicitly require EPA and the Federal courts to consider a violator's economic benefit in imposing a civil penalty. Although the Audit Policy is a voluntary program, EPA does not believe participants should gain an economic advantage over those regulated entities that have maintained compliance with federal environmental statutes. To encourage increases in the quantity and breadth of disclosures, EPA continues its attempts to raise the regulated community's awareness of the Audit Policy. During the past two years, EPA has received certain chemical release- and degradation-related disclosures that we had not before received. Through the use of sector-related Audit Policy initiatives and targeted marketing, EPA has recently received disclosures related to wetlands, air technology, publicly owned treatment works (POTWs) and federal fuel standards.

AUDIT POLICY: NUMBER OF VIOLATIONS DISCLOSED

Question. In fiscal year 1998, how many violations were disclosed under the state audit policies or statutes in each of the states with audit policies or statutes?

Answer. EPA does not have access to this information. To obtain such information, EPA would need to issue to states resource-intensive inquiries that would require clearance through OMB.

AUDIT POLICY: CASES SETTLED BY CORRECTING VIOLATIONS

Question. Question. Why did only 32 percent of companies disclosing potential violations in fiscal year 1998 under the Agency's audit policy settle those cases by correcting violations and taking steps to prevent their recurrence?

Answer. Many of these disclosures have yet to be resolved. EPA has tracked audit policy cases cumulatively by fiscal year so that the collective data does not distinguish when a resolved case was initially disclosed. The number of resolved cases in a given year may include a case that was disclosed that year or in another year. For example, a case may have been disclosed in the last month of a fiscal year and resolved in the subsequent year. That dynamic creates a rolling cycle of cases, for which the resolution time for each depending on the circumstances surrounding the disclosure.

AUDIT POLICY: FISCAL YEAR 1998 DISCLOSURE OF VIOLATIONS

Question. As of fiscal year 1998, why has the Agency granted relief to only 38 percent of the companies disclosing violations under the Agency's audit policy since inception of the policy?

Answer. As of fiscal year 1999, EPA had granted penalty relief to approximately half of the facilities disclosing violations under the Audit Policy since the policy's inception. Facilities that have not been granted penalty relief fall into one of several situations: the disclosure has not yet been resolved; the disclosure did not meet the conditions of the Audit Policy; upon further analysis, EPA determined that a violation did not occur; or the entity disclosed the identity of multiple facilities at the onset of a corporate-wide audit, but ultimately determined that violations occurred at fewer facilities.

Several factors influence the first category. One, a company may not disclose all information necessary to determine the nature of the violation it suspects occurred, or may disclose the information in subsequent communications. Two, EPA has received an increasing number of multi-facility disclosures that may involve many violations and more than one violation type. These multi-facility disclosures usually involve extended schedules for audits, which may not be completed for one year or longer. Three, EPA is receiving disclosures of violation types that require greater analysis than traditional record-keeping violations. Four, in fiscal year 1999 EPA provided Regions with additional tools and information resources in an effort to expedite case resolution time. The results of such efforts should be more apparent in fiscal year 2000.

Through fiscal year 1998, EPA granted penalty relief to an estimated 4 out of 5 facilities whose disclosure cases had been resolved. Of the remaining 20 percent, some included cases where the audit policy was inapplicable because no violation had occurred. The improvements we are making to the case tracking system for audit policy cases will allow us to provide more accurate and detailed information in the future. The Agency has recently lengthened the time for disclosure from 10 to 21 days, and more disclosures are being made under structured auditing agreements with terms identified in advance of factual disclosures, both of which should result in fewer policy denials in the future.

AUDIT POLICY: MEASURE OF UNFAIR BUSINESS ADVANTAGE

Question. The Agency has stated that penalty related changes to the audit policy would allow regulated entities to gain an unfair business advantage. However, the Agency structured the audit policy so that the overwhelming (84 percent) number of violations disclosed under the policy do not address environmental or human health improvements. How has the Agency measured and determined the gain to society in preventing a degree of unfair business advantage outweighs the environmental and human health improvements which would be achieved from allowing those advantage gains?

Answer. Congress, the General Accounting Office, and federal courts have all recognized that it is critical to recover economic benefit a company gains from violating federal laws. This principle is not at odds with EPA's goal of protecting human health and the environment, rather, it is fundamental to achieving that goal. Our commitment to recover economic benefit eliminates the incentive to violate the law by avoiding or postponing compliance. This deterrent effect assures more widespread compliance with the law, which offers obvious benefits to public health and the environment through reduced emissions. Finally, EPA does not agree that record-keeping and reporting requirements in statutes like the Emergency Planning and Community Right to Know Act, which was enacted by Congress in the wake of the Bhopal tragedy, provide no benefit to public health or the environment.

AUDIT POLICY: DETERRENT EFFECT

Question. The Agency fears that elimination of penalties in the audit policy would provide a disincentive for entities to be proactive in their environmental compliance attempts to address the future conduct of an entity. Does the Agency believe that the audit policy is also providing a deterrent effect on the behavior of regulated entities above and beyond the deterrent effect of a strong and vigorous enforcement program? What is the basis for this opinion?

Answer. A study by the National Council of State Legislatures found that more expansive amnesty laws in effect in some states had no effect on the overall level of auditing. EPA believes that the Audit Policy is one component of a multi-faceted approach to obtaining environmental compliance. As noted in the 1992 Price-Waterhouse study, concern for an enforcement action is a strong motivator for cor-

porate environmental auditing. Although EPA wishes to create an incentive for companies to voluntarily correct historical noncompliance, we do not believe it should be done at the cost of those companies that have historically complied with regulations, including those who've made significant capital expenditures to comply with federal law at the time it was required. To treat disclosers under the Audit Policy as if they were historical compliers would create a financial penalty for making prompt capital expenditures required by law.

AUDIT POLICY: PENALTY CHANGES AND ITS EFFECT ON DETERRENT

Question. To what degree would penalty changes to audit policy would materially diminish the deterrent effect of the Agency's strong and vigorous enforcement program? What is the basis for this option?

Answer. EPA has a limited number of resources. Together, a strong enforcement program and the Audit Policy provide a deterrent for noncompliance and an incentive for compliance. Elimination of all penalties under the Audit Policy would eliminate the incentive for compliance by providing a competitive advantage to those companies that do not comply with federal environmental requirements and then later elect to come into compliance without any penalty for the delay in compliance time.

EXISTING CHEMICALS: FISCAL YEAR 1999—FISCAL YEAR 2000 RESOURCES

Question. At what level, in terms of FTEs and dollars, did the agency fund the Existing Chemical Data, Screening, Testing and Management key program in the fiscal year 1999 budget request, fiscal year 1999 operating plan, fiscal year 1999 actuals, fiscal year 2000 budget request, fiscal year 2000 proposed operating plan, and fiscal year 2001 budget request. Provide the information by NPM, appropriation, goal, objective sub-objective, office or region, and activity.

Answer. The information requested is presented in the accompanying spreadsheet.

EXISTING CHEMICALS KEY PROGRAM

[Dollars in thousands]

Existing Chemicals key program Activities	Fiscal year 1999				Fiscal year 2000				Fiscal year 2000 Pres. budget	
	Pres. budget [1]		Operation plan [2]		Pres. budget		Operating plan			
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
OPPTS total (EPM)	125.1	$12,491.2	122.1	$14,225.3	120.4	$23,045.6	118.5	$20,394.5	117.4	$24,412.4
HQ Total	125.1	$12,491.2	122.1	$14,225.3	117.4	$22,779.0	118.5	$20,394.0	114.4	$24,133.2
Chemical Right to Know	.....	.....	.....	$1,250.0	37.0	$14,114.1	37.0	$11,490.0	34.0	$14,487.8
Other Existing Chemicals activities	125.1	$12,491.2	122.1	$12,975.3	80.4	$8,664.9	81.5	$8,904.0	80.4	$9,645.4
Regions: Chemical Right to Know	.....	.....	.....	.....	3.0	$266.6	.....	$0.5	3.0	$279.2

[1] Fiscal year 1999 President's Budget key program totals as displayed in fiscal year 2000 President's Budget submission.
[2] Agency data not available at objective level for fiscal year 1999 actual.

Note: Key Program—Existing Chemicals.

EXISTING CHEMICALS FUNDING REDUCTIONS

Question. Analysis of the Agency's budget requests indicates that EPA reduced funding to the Existing Chemical Data, Screening, Testing and Management key program in the fiscal year 1999 operating plan and the fiscal year 2000 proposed operating plan from the higher levels contained in each year's budget request. Why did the Agency make reductions in Existing Chemical Data, Screening, Testing and Management from each of these budget requests to the following operating plans and what impact did it have on the activity levels of the program?

Answer. EPA found it necessary to make significant budget cuts in fiscal year 1999 as a result of across-the-board reductions made by Congress. The Congressional reductions led to cuts in a variety of programs, including the Existing Chemical Data, Screening, Testing and Management key program. The fiscal year 2000 requested and enacted amounts for Existing Chemicals was higher than in the previous year, primarily because the Agency requested $14 million for the Chemical Right-to-Know initiative. Nevertheless, in fiscal year 2000, the Agency was constrained to reduce other parts of the the Existing Chemical program, as well as the Chemical Right-to-Know Initiative, as a result of the general reductions in the appropriations.

The Agency attempted to reduce the impact of these cuts to the extent possible by analyzing its Existing Chemicals program using the principles of government reinvention to determine the most efficient, publicly responsive, and cost-effective way to proceed. The Agency concluded that the Chemical Right-to-Know (ChemRTK) Initiative offered both the best return on investment and the greatest promise of achieving the Existing Chemicals program's goals of protecting human health and the environment, and adjusted its program activities accordingly. The cooperative, voluntary nature of the program, especially the HPV Challenge Program segment, appeared to offer an excellent opportunity for government and industry to contribute as partners, working in concert with other stakeholders, in a program geared to providing near-term public access to a significant quantity of essential health and safety information, and for the Agency to gain data vital to its core risk assessment and risk management missions. The program offered tangible benefits in terms of both time and cost savings over attempting to use the traditional regulatory, adversarial process to achieve the same ends. The net result is that the core activities and mission of the Existing Chemicals program have benefitted from the investment of resources in ChemRTK.

Within ChemRTK and the HPV Challenge, the Agency adjusted the funding for specific activities according to their relative priority in time. Thus, risk assessment and risk management activities, which require the presence of data, were de-emphasized at the beginning of the project in order to focus more attention on data development and collection activities, which will provide the necessary information in order to conduct the risk assessment work.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: POLLUTANT REDUCTIONS

Question. An Agency performance goal for fiscal year 2001 is that 75 percent of concluded enforcement actions require environmental or human health improvements such as pollutant reduction. Why does the Agency's performance measure call for only 35 percent of concluded enforcement actions to identify pollutant reductions?

Answer. The Agency Performance Goal for 2001 says: 75 percent of concluded enforcement actions will require environmental or human health improvements, such as pollutant reductions and/or changes in practices at facilities. It is difficult to project in advance the percentage of cases which will produce pollutant reductions. The 35 percent measure is a reasonable projection based on performance in previous years.

ENFORCEMENT PERFORMANCE GOALS AND MEASURES: RISKS FACTORS TO DIFFERENT POLLUTANTS

Question. Does the Agency apply any relative risk factors to the different pollutants reduced by enforcement actions to determine the degree of environmental improvement achieved by weight of pollutant reduced? If so, how?

Answer. The Agency does not apply quantitative and/or relative risk factors to the pollutants reduced by enforcement actions. Over the past several years, EPA has recorded information on a range of environmental improvements, such as the expected pollutant reduction and modifications to industrial processes, resulting from Federal enforcement actions. Because EPA has included actions requiring pollutant reductions as an annual performance measure in fiscal year 2000 and fiscal year

2001, we have focused on improving the accuracy and completeness of pollutant information related to concluded enforcement actions. EPA plans to begin a project to address the manner in which quantitative pollutant reduction/controlled amounts are measured and reported for each media program, using standard pollutant names, calculation methods and units of measure.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: REGULATED POPULATIONS MEASURING COMPLIANCE

Question. For which selected regulated populations is EPA measuring compliance rates or other indicators of compliance?

Answer. EPA is currently completing its analyses of potential regulated populations, violations within those populations, and the number of random inspections needed to produce statistically valid compliance rates. This analysis will be completed by July 1, 2000.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: FISCAL YEAR 2000 BASELINE RATE OF COMPLIANCE

Question. What is the fiscal year 2000 baseline rate of compliance or other indicator of compliance for each of the selected regulated populations?

Answer. The Agency will use the first year of statistically valid compliance rates for each regulated population as a baseline against which subsequent years will be compared.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: FISCAL YEAR 1998, FISCAL YEAR 2000 AND FISCAL YEAR 2001 IMPROVEMENTS IN USE/HANDLING OF POLLUTANTS

Question. What was the number of concluded enforcement actions that resulted in improvements in the use or handling of pollutants in fiscal year 1998, fiscal year 2000 and expected in fiscal year 2001?

Answer. For fiscal year 1998 and fiscal year 1999, the percentage of settled enforcement cases requiring various improvements by facilities was 89 percent and 88 percent, respectively. Further, in fiscal year 1998 and fiscal year 1999 respectively, 27 percent and 22 percent of these complying actions required the defendants to perform either use reduction, industrial process changes, emission or disposal changes, remediations or removals. Our target for these types of improvements in fiscal year 2000 and fiscal year 2001 is 35 percent.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: POLLUTANT REDUCTIONS

Question. What was the number of concluded enforcement actions that resulted in improvements in facility management and information practices in fiscal year 1998, fiscal year 2000 and expected in fiscal year 2001.

Answer. For fiscal year 1998 and fiscal year 1999, the percentage of settled enforcement cases requiring improvements in facility management and information practices was 52 percent and 49 percent, respectively. (It should be noted that settled enforcement cases typically require multiple complying actions, so it would not be accurate to claim that about half the settled cases required only changes in facility management and information practices.) We have not set specific targets for this type of improvement in fiscal year 2000 and fiscal year 2001.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: LEVEL OF NON-COMPLIANCE

Question. What was the level of significant non-compliance recidivism in each of the CAA, CWA, and RCRA programs in fiscal year 1998, fiscal year 2000 and expected in fiscal year 2001?

Answer. The tracking of significant non-compliance (SNC) recidivism only began in fiscal year 1999; therefore the only data available for this measure is for fiscal year 1999. In the Clean Air Act program, of those SNCs that returned to compliance in fiscal year 1997, 30 percent were again SNCs within the next two years. In the Clean Water Act program, of those SNCs that returned to compliance in fiscal year 1997, 56 percent were again SNCs at some point within the next two years. In the RCRA program, of those SNCs that returned to compliance in fiscal year 1997, 17 percent were again SNCs at some point within the next two years. (For CAA and the RCRA program, this measure only looks at the inspected universe for the pool of potential repeat SNCs).

In fiscal year 2000, we will establish a firm baseline for this measure, and in fiscal year 2001 our target is reducing SNC recidivism in each program by 2 percentage points.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: FISCAL YEAR 1998, FISCAL YEAR 2000 AND EXPECTED FISCAL YEAR 2001 IN PHYSICAL COMPLIANCE

Question. What was the number of facilities that returned to full physical compliance in less than two years for each of the CAA, CWA, and RCRA programs in fiscal year 1998, fiscal year 2000 and expected in fiscal year 2001?

Answer. The tracking of significant non-complier (SNC) duration began in fiscal year 1999. In the Clean Air Act (CAA) program, of those SNCs (High Priority Violators) that returned to compliance in fiscal year 1999, 258 did so in more than two years; 278 did so in 1 to 2 years; 226 did so in 6 months to one year; and 417 did so in less than 6 months (In the CAA program, a facility loses its SNC status only when a formal order is issued and all penalties have been paid).

In the Clean Water Act (CWA) program, of those SNCs that returned to compliance in fiscal year 1999, 116 did so in more than two years; 129 did so in 1 to 2 years; 134 did so in 6 months to one year; and 570 did so in less than 6 months (In the CWA program in order to be considered a non-SNC a facility does not have to come into full physical compliance. A formal order can take a facility out of SNC).

In the RCRA program, of those SNCs that returned to compliance in fiscal year 1999 53 did so in more than 2 years; 53 did so in 1 to 2 years; 76 did so in 6 months to a year; 184 did so in less than 6 months (In RCRA, a facility is no longer considered a SNC if it has returned to full physical compliance or it is on a compliance schedule.).

In fiscal year 2000, we will establish a firm baseline for this measure, and in fiscal year 2001 our target is increasing the number of facilities in each program returning to full compliance by 2 percentage points.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: INSPECTIONS AND OUTPUT MEASURES

Question. All performance measures in the fiscal year 2001 congressional justification for inspections and investigations are output measures. Why is this still the case? What efforts are underway to develop outcome performance measures for inspections and investigation activities?

Answer. In developing an improved set of enforcement and compliance assurance performance measures, the Office of Enforcement and Compliance Assurance needed to limit the amount of new information reported by Regional offices to headquarters. Our first priority was to collect outcome information about compliance assistance, enforcement actions, and disclosures under the EPA audit policy. Outcome measures for inspections were viewed as a subsequent task. Through a number of pilots underway in Regional and headquarters-operated compliance inspection programs, the Agency is testing ways to collect information on the outcomes of inspection and investigation activities. EPA inspectors participating in these pilots are recording inspection-specific information related to compliance assistance, deficiencies observed, specific actions taken to respond to deficiencies, and other beneficial actions taken in response to the inspection. For example, based on one pilot involving 24 inspections:

—Compliance assistance was provided in 21 of the 24 inspections;
—Twenty-one inspections identified deficiencies;
—In seventeen inspections, corrective actions were taken by facility; and
—In eight inspections, other beneficial actions were taken by facility.

During fiscal year 2000 the Agency will continue to run the pilot projects to determine the value of collecting this type of information. In fiscal year 2001, the Agency will review the data and determine whether the data collection for inspection outcomes should be implemented on a national basis.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: INSPECTIONS CONTRIBUTES TO IMPROVED RATES OF COMPLIANCE

Question. On what basis does the Agency believe its inspection presence contributes to improved rates of compliance and how did the Agency determine this belief including measure the degree of improvement?

Answer. The Agency believes that compliance monitoring inspections are an essential element of a compliance assurance program, along with compliance assistance, incentives for self-policing, and enforcement targeted toward important environmental risks and patterns of non-compliance.

It is not possible to isolate the effects of inspections (or any of the other elements) on rates of compliance. Instead, the Agency will rely on rates of compliance to measure the overall results of using all these elements. In addition, results from individual elements (e.g., pollutant reductions from enforcement cases) will also be used to measure program outcomes.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: INSPECTIONS IMPROVEMENTS AT FACILITIES

Question. On what basis does the Agency believe individual inspections result in changes and improvements at specific facilities and how did the Agency determine this belief including measure the degree of improvement?

Answer. The Agency believes that compliance inspections produce a broad range of changes and improvements at the specific facilities inspected and in the regulated community in general. Compliance inspections:

—identify potential risks to human health and the environment;
—lead to on-the-spot or subsequent correction of violations;
—provide a specific deterrent effect on inspected facilities;
—provide a general deterrent effect on other facilities in the same industry sector or geographic area; and
—complement citizen efforts to monitor compliance.

As mentioned in response to a previous question, the Agency has been conducting pilots to begin documenting outcomes and results from inspections, and may begin collecting this information on a national basis if resources permit.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: INSPECTION/INVESTIGATIONS—CHANGES IN ENVIRONMENTAL AND HUMAN HEALTH

Question. In what ways might the Agency measure how the number and manner of Agency inspections and investigations bring about environment and human health improvements?

Answer. Measuring how inspections and investigations "bring about environmental and human health improvements" can be done in two ways. First, by collecting information from inspectors about outcomes of inspections and investigations we may learn that pollutant reductions and other improvements are occurring. There are several pilot projects underway or planned to collect and analyze this kind of information. Second, by collecting information about improvements that result from enforcement actions, we are measuring how inspections and investigations bring about such improvements since cases are based on inspections and investigations.

For example, the compliance investigations that the Agency has conducted in the electric utility and petroleum refinery sectors have uncovered serious non-compliance. A number of major enforcement actions have resulted from these investigations and on-going investigations may uncover further non-compliance. Most of the non-compliance identified through the investigations should result in measurable environmental improvements, e.g., reduction of air pollutants such as nitrogen oxides, particulate matter, and sulphur dioxides.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: INSPECTIONS/INVESTIGATIONS—CHANGES IN BEHAVIOR

Question. In what ways might the Agency measure how the number and manner of Agency inspections and investigations bring about changes in behavior in the regulated community?

Answer. Measuring how inspections and investigations "bring about changes in behavior in the regulated community" can be done in two ways. First, by collecting information from inspectors about the outcomes of inspections and investigations, we may learn that behavior changes are occurring. There are several pilot projects underway or planned to collect and analyze this kind of information. Second, by collecting information about behavior changes resulting from enforcement actions, we are measuring how inspections and investigations bring about such changes since cases are based on inspections and investigations.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: STATUS OF REGION II PILOT PROJECT

Question. What is the status of the Region II pilot project to document results achieved through inspections? Will the Agency implement the pilot for the entire national program?

Answer. In fiscal year 2000, EPA Region II is piloting a tool to better manage inspection resources. The Region is currently collecting information on how inspections are targeted and the results of those inspections. The results of the pilot will be used by the Region to determine if there are more effective targeting strategies for compliance inspections and whether there is a more efficient way to manage the overall compliance inspection program.

In fiscal year 2001, EPA plans to review the results of the Region II pilot as well as the results of other pilot projects to collect inspection outcome data currently un-

derway in select Regional and Headquarters programs. A decision will then be made about whether to expand the used of the Region II targeting pilot and/or the other pilots designed to learn more about inspection outcomes.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: NUMBER OF QUALITY MANAGEMENT PLANS (QMS)

Question. How many Quality Management Plans (QMS) will the enforcement program develop and implement for major systems in fiscal year 2000, which major systems will have plans, and which major systems will still require plans?

Answer. In fiscal year 2000, no additional work will be undertaken on the Office of Enforcement and Compliance Assurance (OECA)'s Quality Management Plan (QMP) for its data systems. In fiscal year 1998, OECA initiated evaluations of its information systems under its Quality Management Plan. To date, OECA has completed a baseline data quality audit, data quality objectives, quality assurance project plans, and standard operating procedures for the National Compliance Data Base and the Resource Conservation and Recovery Information System, and data quality objectives for the Permit Compliance System. No work has been completed to date on the AIRS Facility System, the Enforcement Docket, and the Safe Drinking Water Information System.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: QMS DATA SYSTEMS COMPLETED IN FISCAL YEAR 2001

Question. For which systems will the enforcement program complete QMS in fiscal year 2001?

Answer. The Office of Enforcement and Compliance Assurance (OECA) will use its data modernization efforts to address and resolve the challenging problem of improving data quality. Work on additional portions of the OECA Quality Management Plan (QMP) in the fiscal year 2001 time frame will be considered in coordination with the effort to modernize OECA data systems and integrate enforcement and compliance data. Modernization and integration is being undertaken as a part of the Agency's Integrated Information Initiative. Additional work on the QMPs may well be delayed as resources are diverted to modernization in fiscal year 2001.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: ASSISTANCE AND TRAINING ACTIVITIES

Question. What outcome performance measures could the enforcement program develop for its capacity building activities to measure environmental improvements resulting from the assistance and training activities?

Answer. The capacity building measure was intentionally designed to only count outputs (i.e., training courses delivered, etc.). Measuring the outcomes or environmental results of capacity building efforts would require extensive new reporting by state, local, and tribal governments who use EPA training and other capacity building efforts to produce outcomes.

ENFORCEMENT PERFORMANCE GOALS/MEASURES: ENVIRONMENTAL IMPROVEMENTS FROM COMPLIANCE INCENTIVES

Question. While the performance measure for the compliance incentives program measures the behavior of the regulated community, there is no measurement for environmental or human health improvements. What performance measures could the enforcement program develop to determine the environmental improvements coming from the compliance incentives program.

Answer. OECA has recently started tracking environmental or human health improvements resulting from self disclosures in the same manner that such improvements are tracked for enforcement cases. We are still in the implementation stages of developing a reporting system and providing guidance to EPA Regional Offices. However, once the implementation process is complete, we will be able to provide full results from the self-disclosures similar to those currently reported for enforcement cases, such as pollutants reduced and changes in facility practices.

ENFORCEMENT PERFORMANCE GOALS/MEASURE: NUMBER OF ENTITIES VOLUNTARILY DISCLOSING VIOLATIONS

Question. Why does the Agency not include the number of entities voluntarily disclosing violations of environmental violations (other than paperwork or record keeping requirements)?

Answer. The Agency does currently report (e.g., in EPA's fiscal year 1999 Annual Performance Report) the number of entities which voluntarily elect to use EPA's audit policy to disclose and correct any or all violations disclosed under the policy.

ENFORCEMENT PERFORMANCE GOALS/MEASURE: 10 COMPLIANCE ASSISTANCE OUTCOME MEASURES PROJECTS

Question. Describe the 10 compliance assistance outcome measurement projects for which information is being collected to assess the impacts of compliance assistance. What is the status of each of those efforts?

Answer. Below is a table that describes each project and provides the status. Each of these projects will collect data on OECA's compliance assistance outcome measures which fall into three categories: (1) improved awareness/understanding of regulatory requirements; (2) regulatory and non-regulatory behavioral changes (e.g. getting a permit, conducting an audit); (3) environmental and human health improvements. The various projects will collect the data for these measures through surveys, on-site revisits and database reviews.

Region	Project Summary	Measurement Methodology	Status
I	Evaluation of the New England Environmental Assistance Team's Auto Service Compliance Assistance Program, which consists of written assistance material, workshops and on-site assistance.	Mailed follow-up Survey to 14,000 recipients of auto service compliance assistance.	Survey sent out 1st Quarter fiscal year 2000 results currently being summarized.
II	Evaluation of the effectiveness of the Dry Cleaning Compliance Assistance Program.	1. Develop a baseline of the compliance rate and perc alternative use among dry cleaners in NYC using data from inspections and compliance assistance visits that were conducted in to date. 2. Follow-up surveys sent to those participating in compliance assistance program..	1. Baseline underway. 2. Follow-up by 3Q 2000.
III	Evaluation of Clean Air Act Risk Management Plan Compliance Assistance Workshops.	Phone Survey to 100 attendees of the workshop.	1. 40 percent response rate. 2. 68 percent of facilities made changes as a result of the workshop.
IV	NPMS Pilot Project: Charleston CBEP Project: Developing workshops/seminars/training and compliance guides and on-site visits. Bulk of assistance conducted by SC DHEC. Primary form of assistance is on site. Assistance is provided to primarily Auto Repair and Paint Body Shop businesses.	A. Compliance Baseline for 10 facilities (out of 150 total). B. Follow-Up to Baseline through on-site inspections after assistance provided. C. Interim Report on Results.	A. Done. B. Done. C. 3Q 2000.
V	SDWA Project with the Department of Interior: Source Water Assessments for groundwater sources on National Park Service Lands. Assist States of Minnesota, Indiana, and Wisconsin making susceptibility determinations for water supplies.	A. Letters sent to 3 National Parks to outline process for info gathering. B. Follow-up site visits that included providing assistance. C. Summary report on assessments that may be used to develop management education and outreach materials for other Federal Facility compliance assistance visits. D. Surveys to Park Service Lands visited.	A. Done. B. Done. C. End of 2nd Q. D. Mid-3rd Q
VI	NPMS Pilot: Educate Maquiladora industries through outreach seminars on their hazardous waste environmental management obligations. Seminars were conducted in July and August of 1998.	A. Compliance Manifest Baseline using RCRIS and HAZTRAKS. B. Survey seminar participants in mid-May of 1999. C. Section 3007 Request to determine changes in manifest baseline. (on hold due to contract problems) D. Final Report on Results.	Completed. 150 surveys mailed out, 26 response. 16 percent response rate. a. 96 percent felt more aware and 60 percent had a better understanding. b. 58 percent made changes in env. practices and 50 percent made a physical change. c. 42 percent reduced waste.

Region	Project Summary	Measurement Methodology	Status
VI	Offer compliance assistance to the Maritime industry at a conference in August 1998..	A. Compliance Baseline. Region has an existing baseline. B. Follow-up survey to industry that attended the conference C. Post-Compliance Assistance Baseline through follow-up inspections to an industry sample. (7 or 8 already underway, facilities that attended the workshop). D. Final Report on Results.	B. Completed. 123 surveys mailed out; 33 percent response rate. a. 93 percent felt more aware and 85 percent had a better understanding. b. 63 percent made changes in env. practices, 29 percent installed pollution control equipment, and 71 percent made a physical change. c. 24 percent reduced waste. C. Based on follow up inspections, noncompliance dropped from 33 percent to 12 percent.
VII	EPCRA/TRI Release Inventory Project. Conducted four workshops/seminars/training and provide compliance assistance materials. These one-day workshops were conducted in April, 1999 and were sponsored by EPA, Region 7 and cosponsored by Local Emergency Planning Committees. Primary assistance involves instruction on completing Form R as required under Section 313 of EPCRA. Assistance is provided to industries listed by certain Standard Industrial Code (SIC) code that meet reporting requirements of EPCRA, Section 313. Also includes seven new industry sectors.	A. Follow-up survey to industries that attended workshops. B. Follow-up survey to industries in specific SIC codes that did not attend workshops. C. Analysis of Post-Compliance Assistance Baseline through review of Form Rs filed. D. Final Report on Results.	A. 50 percent response rate. 58 percent of those responding felt that the workshops helped them to determine if their facility was subject to EPCRA reporting requirements. 52 percent felt the information they received helped improve the way they manage records and determine emissions estimates and off-site transfers of toxic substances when completing Form R. B. 1Q 2000 C. 3Q 2000 D. 3Q 2000.
VIII	The overall goal of this project is to identify, measure and compare the most effective and efficient approaches to motivating facilities to achieve or exceed compliance, and the result to the environment. This is to be accomplished by developing measures for the various activities of enforcement (pollution prevention, compliance assistance activities, and other ''non-traditional activities) and incorporating these measures into the regional inspection case conclusion data sheets (CCDS).	The Region 8 project calls for taking Case Conclusion information and reporting it as environmental outputs and outcomes (in addition to the ''traditional'' enforcement activities). Region 8 is working with the State of Colorado to identify the specific media, measurements and reports that will most effectively present and reflect compliance assistance activities. The selected measures and facilities will need to take into consideration already scheduled inspections in Region 8 states.	1. Determination of media/sector/geographic area (2nd quarter 2000). 2. Ensure consistency/tie-in to NPMS measures (2nd quarter 2000). 3. Focus groups with inspectors to test ability to measure activities (2nd quarter 2000). 4. Incorporation into Region VIII CATS database.
IX	Compliance Assistance Outreach Materials for MACT degreaser standard.	A. Compliance assistance baseline from site visits by Bay Area Resources Board and compliance reports and permits submitted to BARD and EPA. B. On-site Pre-workshop ''test of workshop participants current knowledge. C. On-site Post-workshop ''test of knowledge gained during the workshop.	A. 1Q 2000. B. 1Q 2000. C. 3Q 2000.

Region	Project Summary	Measurement Methodology	Status
X	1. Evaluation of EPA 112(r) workshops.	1. Survey of workshop participants at completion of workshops.	1. Results in house 112(r) workshops found 98 percent more aware as result of workshop; 16 percent will reduce chemical inventories; 38 percent will increase p2; 62 percent will increase emergency response measures; 19 percent increase in # of risk management plans submitted.

ENFORCEMENT PERFORMANCE GOALS/MEASURE: STATUS OF NATIONAL PERFORMANCE MEASURES STRATEGY

Question. Describe the status of the National Performance Measures Strategy and implementation of any remaining measures.

Answer. Fiscal year 2000 will be the first year that OECA will be reporting results for all of the measures from the NPMS Profile. These results will be available in the second quarter of fiscal year 2001.

WETLANDS/CWAP: LEVEL OF FUNDING

Question. At what level, in terms of FTE and dollars, did the Agency fund the Wetlands (CWAP) key program in the fiscal year 1999 budget request, fiscal year 1999 operating plan, fiscal year 1999 actuals, fiscal year 2000 budget request, fiscal year 2000 proposed operating plan, and fiscal year 2001 budget request. Provide the information by NPM, appropriation, goal, objective, sub-objective, office or region, and activity.

Answer. Agency funding of the Wetlands key program is detailed below.

OFFICE OF WATER [1]

Fiscal year	Dollars	FTE
1999 Budget Request	$17,489,400	158.6
1999 Operating Plan	$15,694,900	150.5
2000 Budget Request	$18,124,500	164.6
2000 Proposed Operating Plan	$15,730,000	150.3
2001 Budget Request	$17,315,200	149.1

[1] Appropriation: EPM; Goal 2: Clean and Safe Water; Objective 2: Conserve and Enhance Nation's Waters.

WETLANDS/CWAP: REDUCTIONS IN FISCAL YEAR 1999 OP AND FISCAL YEAR 2000 PROPOSED OP

Question. Analysis of the Agency's budget requests indicates that EPA reduced funding to the Wetlands (CWAP) key program in the fiscal year 1999 operating plan and the fiscal year 2000 proposed operating plan from the higher levels contained in each year's budget request. Why did the Agency make reductions in Wetlands (CWAP) from each of these budget requests to the following operating plans and what impact did it have on the activity levels of the program?

Answer. Reductions to wetlands activities resulted from the requirement to absorb the general reductions and congressional earmarks included in the fiscal year 1999 and fiscal year 2000 Environmental Programs and Management appropriation. Impacts of the wetlands cuts included diminished support for monitoring and assessment of the extent and health of the nation's wetlands; reduced funding for outreach and education on wetlands protection issues; and elimination of funding for the Five-Star Wetlands and Stream Corridor Assistance Grants.

GRANTS MANAGEMENT: NON-PROFIT RECIPIENTS

Question. How many different non-profit recipients received new non-construction grant awards in fiscal year 1999?

Answer. EPA issued new non-construction grant awards to 881 different non-profit recipients in fiscal year 1999.

GRANTS MANAGEMENT: DOLLAR AMOUNT OF NON-PROFIT AWARDS

Question. How many dollars did the Agency award to non-profit recipients in non-construction grants in fiscal year 1999?

Answer. The Agency awarded $252,937,107 to nonprofit recipients in fiscal year 1999.

GRANTS MANAGEMENT: TOP 20 NON-PROFIT GRANT RECIPIENTS NUMBER OF AWARDS

Question. List the top twenty non-profit EPA grant recipients by number of awards in fiscal year 1999. Provide also the number of awards and total dollar amount awarded.

Answer. The following table contains the top twenty non-profit EPA grant recipients in fiscal year 1999 by the number of awards including the number of wards and total dollar amount awarded.

FISCAL YEAR 1999 TOP NON-PROFIT GRANT RECIPIENTS

[By Number of Awards]

Rank	Recipient	City/State	Dollars [1]	No. of Awards [1]
1	NATIONAL OLDER WORKER CAREER CENTER	WASHINGTON, DC	$21,293,303	122
2	NATIONAL CAUCUS/CTR ON BLACK AGED, INC	WASHINGTON, DC	$7,541,181	71
3	NATIONAL SENIOR CITIZEN EDUC. & RES. CTR	SILVERSPRING, MD	$9,829,653	55
4	NATIONAL ASIAN PACIFIC CENTER ON AGING	SEATTLE, WA	$5,916,381	50
5	NATIONAL ASSOCIATION FOR HISPANIC ELDERLY	PASADENA, CA	$5,322,630	32
6	ENVIRONMENTAL CAREERS ORGANIZATION	BOSTON, MA	$6,892,839	31
7	NATIONAL ACADEMY OF SCIENCE NRC	WASHINGTON, DC	$3,550,282	23
8	NATIONAL COUNCIL ON AGING, INC	WASHINGTON, DC	$3,423,156	23
9	RESEARCH TRIANGLE INSTITUTE	RESEARCH TRIANGLE PARK, NC	$3,265,787	14
10	INTERNATIONAL CITY/COUNTY MGMT ASSOC	WASHINGTON, DC	$2,232,286	12
11	ENVIRONMENTAL LAW INSTITUTE	WASHINGTON, DC	$1,235,876	12
12	NATIONAL SAFETY COUNCIL	ITASCA, IL	$952,079	12
13	NATIONAL ASSOCIATION OF COUNTIES	WASHINGTON, DC	$967,176	10
14	NATIONAL CONFERENCE OF STATE LEGISLATURES	DENVER, CO	$726,272	10
15	COUNCIL OF STATE GOVERNMENTS	LEXINGTON, KY	$389,569	10
16	INTER TRIBAL COUNCIL OF AR1ZONA, INC	PHOENIX, AZ	$624,029	9
17	NEBRASKA GROUNDWATER FOUNDATION	LINCOLN, NE	$346,388	9
18	SOCIETY FOR APPLIED ANTHROPOLOGY	OKLAHOMA CITY, OK	$227,075	9
19	NORTHEAST STATES FOR COORDINATED AIR	BOSTON, MA	$2,438,494	8
20	GLOBAL ENVIRONMENT & TECHNOLOGY FDN	ANNANDALE, VA	$1,337,853	8

[1] Dollars and Awards include increase amendments to existing grants as well as new grants made in fiscal year 1999.

Question. List the top twenty nonprofit EPA grant recipients in fiscal year 1999 in terms of amount of funds awarded. Provide also the number of awards and total dollar amount awarded.

Answer. The following table contains the top twenty non-profit EPA grant recipients in fiscal year 1999 by amount of funds awarded including the number of awards and total dollar amount awarded.

FISCAL YEAR 1999 TOP NON-PROFIT GRANT RECIPIENTS

[By Number of Awards]

Rank	Recipient	City/State	Dollars [1]	No. of Awards [1]
1	NATIONAL OLDER WORKER CAREER CENTER	WASHINGTON, DC	$21,293,303	122
2	BORDER ENVIRONMENTAL COOPERATION COMM	EL PASO, TX	$10,000,000	1
3	NATIONAL SENIOR CITIZEN EDUC. & RES. CTR	SILVER SPRING, MD	$9,829,653	55
4	NATIONAL RURAL WATER ASSOCIATION	DUNCAN, OK	$8,000,006	3
5	NATIONAL CAUCUS/CTR ON BLACK AGED, INC	WASHINGTON, DC	$7,541,181	71
6	ENVIRONMENTAL CAREERS ORGANIZATION	BOSTON, MA	$6,892,839	31
7	BATTELLE MEMORIAL INSTITUTE	COLUMBUS, OH	$6,572,500	3
8	ONONDAGA LAKE CLEANUP CORP	SYRACUSE, NY	$6,243,500	1
9	NATIONAL ASIAN PACIFIC CENTER ON AGING	SEATTLE, WA	$5,916,381	50
10	WEST VIRGINIA UNIVERSITY RESEARCH CORP	MORGANTOWN, WV	$5,798,270	7
11	UPPER SAVANNAH COUNCIL OF GOVERNMENTS	GREENWOOD, SC	$5,325,000	1
12	NATIONAL ASSOCIATION FOR HISPANIC ELDERLY	PASADENA, CA	$5,322,630	32

FISCAL YEAR 1999 TOP NON-PROFIT GRANT RECIPIENTS—Continued

[By Number of Awards]

Rank	Recipient	City/State	Dollars [1]	No. of Awards [1]
13	AMERICAS CLEAN WATER FOUNDATION	WASHINGTON, DC	$5,185,000	2
14	AMERICAN WATER WORKS ASSOC. RES.FOUND	DENVER, CO	$4,989,000	4
15	NATIONAL ACADEMY OF SCIENCE NRC	WASHINGTON, DC	$3,550,282	23
16	NATIONAL COUNCIL ON AGING, INC	WASHINGTON, DC	$3,423,156	23
17	NATIONAL JEWISH MEDICAL & RESEARCH CTR	DENVER, CO	$3,412,500	1
18	RESEARCH TRIANGLE INSTITUTE	RESEARCH TRIANGLE PARK, NC	$3,265,787	14
19	NATIONAL FISH & WILDLIFE FOUNDATION	SAN FRANCISCO, CA	$3,003,279	2
20	WATER ENVIRONMENT RESEARCH FOUNDATION	ALEXANDRIA, VA	$2,925,000	1

[1] Dollars and Awards include increase amendments to existing grants as well as new grants made in fiscal year 1999.

GRANTS MANAGEMENT: BENCH AND ON-SITE REVIEWS MEASUREMENT

Question. Why does the Agency not measure the number of bench reviews or on-site reviews conducted in order to gauge the activities of the grants management program?

Answer. As part of the Grantee Compliance Assistance Initiative, all Grants Management Offices are required to report quarterly the number of on-site reviews and bench reviews. (We assume the definition of "bench reviews" is the same as "desk reviews" which are an evaluation performed in-house at the Federal Grants Office largely, if not, entirely, from the desk. The Grants Management Office will perform an evaluation of the recipient's procurement system, property, financial and general administrative system; communicate with the project officer and the recipient; and obtain documentation, as needed.) The Agency is currently expanding the Initiative to establish an Agency-wide overview of post-award management and outreach activities. In addition to the Grants Offices, Headquarters and Regional Program Offices will be required to identify and report on post-award activities. The Initiative will establish national goals; and identify and document post-award activities, namely on-site reviews. The Agency also will develop a database to track planned and actual grantee on-site visits performed by the Grants Management Offices to help avoid duplication and to help ensure adequate coordination across the Agency.

GRANTS MANAGEMENT: FISCAL YEAR 1999 BENCH REVIEWS BY REGION

Question. How many bench reviews did grants management offices conduct in fiscal year 1999? List by Region.

Answer. The Grants Administration Division is defining "bench reviews" as "desk reviews". (We assume the definition of "bench reviews" is the same as "desk reviews" which are an evaluation performed in-house at the Federal Grants Office largely, if not, entirely, from the desk. The Grants Management Office will perform an evaluation of the recipient's procurement system, property, financial and general administrative system; communicate with the project officer and the recipient; and obtain documentation, as needed.) The Grants Management Offices conducted a total of 21 desk reviews in fiscal year 1999. Please see the following chart for a list of fiscal year 1999 desk reviews by Region.

Grants Management Office	*Desk Reviews*
Region 1	
Region 2	2
Region 3	5
Region 4	
Region 5	
Region 6	9
Region 7	
Region 8	5
Region 9	
Region 10	
Headquarters	
TOTAL	21

Active grants management involves many types of activities, desk or "bench review" being just one of these activities (some Grants Management Offices, Regions 1 and 4, for example, allocate significant amounts of time providing pre and post award workshops and training for grantees. In fiscal year 1999 for example, the

Grants Management Offices nation-wide, conducted workshops and training sessions for 671 grantees).

GRANTS MANAGEMENT: FISCAL YEAR 1999 ON-SITE REVIEWS BY REGION

Question. How many on-site reviews did grants management offices conduct in fiscal year 1999? List by Region.

Answer. The following is a listing of on-site reviews conducted by grants management offices in fiscal year 1999.

Grants Management Office	*On-Site Reviews*
Region 1	26
Region 2	19
Region 3	6
Region 4	1
Region 5	5
Region 6	1
Region 7	5
Region 8	7
Region 9	50
Region 10	4
Headquarters	20
TOTAL	144

GRANTS MANAGEMENT: SINGLE AUDIT REPORTS

Question. How many Agency grants required single audit reports in fiscal year 1999 based on the level of funds received by EPA? On what does the Agency base this conclusion.

Answer. Approximately 608 grantees received over $300,000 in grants from EPA in fiscal year 1999. This number is based on funds awarded in fiscal year 1999 and not the expenditures. Please note, the Single Audit Act requirement is based on total expenditures from all Federal Agencies and not award data from a single Agency.

GRANTS MANAGEMENT: SINGLE AUDIT REPORTS CONDUCTED BY GRANTEES

Question. How many single audit reports were conducted by EPA grantees in fiscal year 1999? On what does the Agency base this conclusion?

Answer. Based on the Federal Audit Clearinghouse Data Query, to date, 325 reports were received on EPA grantees in fiscal year 1999. Under the Single Audit Act, the Bureau of Census is responsible for the collection of Single Audit Reports from recipients receiving Federal Assistance and for determining whether the reports are acceptable or unacceptable. Grantees are allowed six months after the close of the fiscal year to submit their Single Audit.

GRANTS MANAGEMENT: ASSISTANCE AGREEMENT AUDIT FISCAL YEAR 2001 FINDING

Question. Why is the Agency proposing reduced funding for the Assistance Agreement Audits key program in fiscal year 2001 when the number of assistance agreements awarded by the EPA has exploded over the last five years?

Answer. The decrease is attributed to: (1) the closeout of the OIG's construction grant strategy; (2) the completion of the first cycle of OIG's Clean Water State Revolving Fund (CWSRF) Strategy; and (3) the implementation of the OIG's Assistance Agreement Issue Area Plan. In fiscal year 1999, the OIG successfully completed its Construction Grant Audit Strategy. In March 1994, the OIG developed a strategy, using a risk-based approach, where we determined that 414 grants in the amount of $6.5 billion would be subject to audit. As of January 2000, only 18 projects are still under consideration for audit.

The OIG CWSRF Audit Strategy included resources to review state financial statement audits conducted by other parties or to perform these audits ourselves. Several states plan to conduct these audits in the future rather than have the OIG conduct them, thus reducing the OIG resources requirement.

Finally, the OIG has initiated a major new audit effort of EPA's management and oversight of assistance agreements with its Assistance Agreement Issue Area Plan. This plan focuses on EPA's systems to manage and administer its assistance agreements and expands OIG audit coverage of $2.4 billion awarded to state, local governments, tribes, universities, and non-profit organizations. Prior OIG audits focused on individual regions, programs and recipients. The implementation of our As-

sistance Agreement Issue Area Plan will result in evaluating issues nationally which also allows us to consolidate the OIG resource requirement.

GRANTS MANAGEMENT

Question. At last examination, fewer than two percent of non-profit grantees were subject to bench or on-site reviews conducting transaction testing. Do the Agency's auditors believe this rate of review is sufficient to ensure Agency funds are protected from mismanagement or misuse of funds? What rate of audit is sufficient to safeguard Agency funds?

Answer. Single Audits conducted in accordance with OMB Circular A–133 provide the primary assurance that Federal funds are protected from mismanagement or misuse. Non-Federal entities that expend $300,000 or more in a year in Federal awards must have a single or program-specific audit conducted for that year in accordance with the provisions of OMB Circular No. A–133, Revised June 24, 1997, "Audits of States, Local Governments, and Non-Profit Organizations." An audit made in accordance with A–133 must be in lieu of any financial audit required under individual Federal awards. The scope of a Single Audit covers three areas: (1) financial statements; (2) internal controls; and (3) compliance with laws, regulations, and the provisions of contracts or grant agreements that may have a direct and material effect on each of its major programs. Any additional audits must be planned and performed in such a way as to build upon work performed by other auditors.

The OIG recently expanded this audit coverage of assistance agreements with a new audit effort. On March 31, 2000, we issued our Assistance Agreement Issue Area Plan. This plan outlines a series of audits designed to evaluate EPA's processes and systems to manage and administer its assistance agreements. This will allow us to identify systemic problems in both the financial and performance aspects of assistance agreements and develop solutions that affect the entire population of assistance agreements. Part of this issue area will assess non-profits and we have recently begun that survey. With a non-profit universe of more than 1700 agreements totaling more than $600 million, we believe this approach offers more potential to identify and correct mismanagement and/or misuse than individually targeted assistance agreement audits.

The expansion of audit coverage for assistance agreements consists of single audits as well as Performance audits of EPA's Grants Management. There are three ongoing surveys which are Non-competitive grants, Oversight of non-profit grants, and Headquarters 40 Product Accomplishments. Each of these surveys have a different amount of non-profit grants that are being reviewed. They are as follow:

—Non-competitive Grants = 105 non-profit grant being reviewed Oversight of non-profit grants = 50 non-profit grants being reviewed

—HQ 40 Product Accomplishments = 48 non-profit grants being reviewed

Additionally, during fiscal 2000, the Agency plans to increase its on-sight reviews of assistance recipients. The headquarters Grants Administration Office (GAD) plans to perform 26 reviews of assistance recipients (about 75 per cent of the reviews are of non-profit organizations) of which seven have already been completed. The GAD selects the recipients for review based on four criteria: (1) total dollar value of EPA awards to the entity; (2) number of grants awarded to the entity; (3) known problems; and (4) discussions with the grant specialist. EPA's regional offices also perform on-site reviews of grant recipients. These reviews provide additional assurance that recipients are performing and federal funds are used appropriately.

LEAD RISK REDUCTION: FISCAL YEAR 1999—FISCAL YEAR 2000 RESOURCES

Question. At what level, in terms of FTEs and dollars, did the agency fund the Lead Risk Reduction key program in the fiscal year 1999 budget request, fiscal year 1999 operating plan, fiscal year 1999 actuals, fiscal year 2000 budget request, fiscal year 2000 proposed operating plan, and fiscal year 2001 budget request. Provide the information by NPM, appropriation, goal, objective sub-objective, office or region, and activity.

Answer. The information requested is presented in the accompanying spreadsheet.

FISCAL YEAR 2001 PRESIDENT'S BUDGET BY ACTIVITY—LEAD RISK REDUCTION KEY PROGRAM AND STATE GRANTS FOR LEAD RISK REDUCTION KEY PROGRAM

[Dollars in thousands]

Goal, Objective, Sub-objective, Activity	Fiscal year 1999				Fiscal year 2000				Fiscal year 2001	
	Pres Bud [1]		Op Plan [2]		Pres Bud		Op Plan		Pres Bud	
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
OPPTS TOTAL (EPM + STAG)	121.4	$30,640.9	117.4	$30,623.5	115.8	$2,8698.5	95.2	$2,6519.3	92.6	$27,285.4
EPM Total (HQ + Regions)	121.4	$16,928.7	117.4	$16,911.3	115.8	$14,986.3	95.2	$12,807.1	92.6	$13,573.2
Lead Risk Reduction Program:										
Obj. 2—Reduce Lead Poisoning (HQ)	45.1	$11,046.6	43.0	$11,029.2	41.4	$8,915.3	44.6	$8,425.2	43.1	$9,076.2
Obj. 2—Reduce Lead Poisoning (REGIONS)	74.4	$5,882.1	74.4	$5,882.1	74.4	$6,071.0	50.6	$4,381.9	49.5	$4,497.0
Grants to States for Lead Risk Reduction: Obj. 2—Reduce Lead Poisoning (STAG)	.....	$13,712.2	.....	$13,712.2	.....	$13,712.2	.....	$13,712.2	.....	$13,712.2

[1] Fiscal year 1999 President's Budget key program totals as displayed in fiscal year 2000 President's Budget submission.
[2] Agency data not available at objective level for fiscal year 1999 actual.

Note: Key Program—Lead Risk Reduction. Key Program—Grants to States for Lead Risk reduction.

LEAD RISK REDUCTION: FUNDING REDUCTIONS

Question. Analysis of the Agency's budget requests indicates that EPA reduced funding to the Lead Risk Reduction key program in the fiscal year 1999 operating plan and the fiscal year 2000 proposed operating plan from the higher levels contained in each year's budget request. Why did the Agency make reductions in Lead Risk Reduction from each of these budget requests to the following operating plans and what impact did it have on the activity levels of the program?

Answer. EPA's lead program reductions were the result of the following actions:

1. EPA found it necessary to make significant budget cuts in fiscal year 1999 as a result of across-the-board reductions made by Congress. The Congressional reductions led to cuts in a variety of programs, including lead risk reduction. The impacts of the lead program reductions were felt most keenly in the areas of regulatory development and program implementation.

2. EPA's policy is to not carry over Congressional Add-ons. Therefore, OPPTS funding for lead program outreach activities in fiscal year 2000 was reduced. The Agency was unable to continue funding a cooperative agreement with the National Safety Council for public education and outreach activities relating to lead risk reduction. Other activities that had to be curtailed included translation of existing outreach materials (English to Spanish), development of new outreach materials, printing activities and technical assessments.

3. As part of a review of FTE charging under EPA's new GPRA structure, we made adjustments to more accurately reflect where regional work is being performed. FTE included under the lead activity line were in fact performing work in areas such as asbestos and PCBs. This correction is noted in the fiscal year 2001 President's Budget. There are no performance implications resulting from this technical correction.

4. The remaining reductions in fiscal year 2000 result from an on-going effort to improve grants management. We reduced overall costs in 2000 with no impact to the program.

IMPROVED PERFORMANCE MEASURES

Question. How many annual planning goals did the Agency include in its fiscal year 2000 annual performance plan? How many of the annual planning goals were output goals? How many were outcomes? How many set goals to improve the environment or human health?

Answer. EPA has 74 Annual Performance Goals (APGs) in the Agency's fiscal year 2000 Annual Plan.

GAO in a report entitled "Managing for Results—EPA Faces Challenges in Developing Results Oriented Performance Goals and Measures," evaluated the 73 APGs contained in an earlier version of EPA's Annual Performance Plan that was released with the fiscal year Congressional Justification document in February, 1999.

GAO classified 44 of the 73 APGs as 'Outputs' and 29 as either 'End Outcomes' or 'Intermediate Outcomes'. End Outcomes are defined as the results of programs and activities compared to their intended purposes. Intermediate Outcomes show progress toward achieving end outcomes. The End Outcomes explicitly show measured improvements in the environment or human health. GAO classified 20 of the APGs as 'End Outcomes.'

Question. How many annual planning goals did the Agency include in its fiscal year 2001 annual performance plan? How many of the annual planning goals were output goals? How many were outcomes? How many set goals to improve the environment or human health?

Answer. EPA's fiscal year 2001 Annual Performance Plan contains 75 Annual Performance Goals (APGs). The Agency has just started the process of classifying its fiscal year 2001 Annual Performance Goals (APGs) according to end outcomes, intermediate outcomes, outputs. The process will include an internal peer review by the various Agency Goal Teams.

Question. How many performance measures did the Agency include in its fiscal year 2000 annual performance plan? How many of the performance measures measured outputs? How many measured outcomes? How many measured improvements in the environment or human health?

Answer. EPA has 166 Annual Performance Measures (APMs) in the Agency's fiscal year 2000 Annual Plan.

GAO in a report entitled "Managing for Results—EPA Faces Challenges in Developing Results Oriented Performance Goals and Measures," evaluated the 157 APMs contained in an earlier version of EPA's fiscal year 2000 Annual Performance Plan that was released with the fiscal year 2000 Congressional Justification document in February, 1999.

GAO classified 118 of the 157 APMs as 'Outputs' and 39 as either 'End Outcomes' or 'Intermediate Outcomes'. End Outcomes are defined as the results of programs and activities compared to their intended purposes. Intermediate Outcomes show progress toward achieving end outcomes. The End Outcomes explicitly show measured improvements in the environment or human health. GAO classified 30 of the APMs as 'End Outcomes.'

Question. How many performance measures did the Agency include in its fiscal year 2001 annual performance plan? How many of the performance measures measured outputs? How many measured outcomes? How many measured improvements in the environment or human health?

Answer. EPA's fiscal year 2001 Annual Performance Plan contains 163 Annual Performance Measures (APMs). The Agency has just started the process of classifying its fiscal year 2001 Annual Performance Measures according to end outcomes, intermediate outcomes, outputs. The process will include an internal peer review by the various Agency Goal Teams.

Question. What process is the Agency using to increase the number of outcome goals and measures? How are program offices held accountable for producing outcome goals and measures to be incorporated into the annual performance plan?

Answer. EPA is committed to increasing the outcome orientation of our performance measures and goals. While "activity" or "output" measures and goals are important for program management purposes, it is the programmatic, environmental, and human health results from EPA's activities, not the activities themselves, that matter most to public welfare.

In recognition of the Agency's need to increase the number of outcome or results-based goals and measures, EPA's Office of the Chief Financial Officer (OCFO) has established a Performance Measurement Improvement (PMI) Team. The primary objective of this team is to support EPA's program offices in their efforts to increase the general quality and outcome orientation of the Agency's performance goals and measures. OCFO's PMI Team is involved in efforts such as general workshop and training sessions, on-going analyses of annual goals and measures, and various other Goal-specific performance measurement improvement projects.

The lead within EPA for developing results-based performance measures and goals, however, rests with the program offices. Working with the States, Tribes, OCFO's PMI Team, and other partners, program offices have initiated various improvement projects such as improvement work teams, workshops, and special analyses to support development of more outcome-oriented measures and goals. Specific examples of program office performance measurement improvement initiatives include: the Office of Enforcement and Compliance Assurance's development of their National Performance Measurement Strategy, which includes a plan to develop more outcome-based performance measures and goals; the Office of International Activities formation of a "best practices" working group which has developed more outcome-oriented measures and goals; the Office of Research and Development's ongoing analysis to identify and learn from results-based, research-related measures and goals employed by other federal agencies; and the Office of Prevention, Pesticides, and Toxics Substances working group and cooperative agreement with Florida State University to develop more outcome-focused measures and goals.

EPA's Program offices are held accountable for improving the general quality and outcome orientation of their goals and measures. In accordance with Agency guidance for developing annual performance goals and measures, program offices must submit their annual goals and measures to OCFO for review each Summer in time for the OMB budget submission and each winter in time for the Congressional budget justification and Annual Plan submission. Also, EPA's "Goal Teams" meet each Spring with the Deputy Administrator to report on EPA's goals and measures, efforts to improve these goals and measures, and progress toward achieving EPA's goals. Specific topics to be addressed by EPA's Goal Teams this spring will likely include: development of better performance goals and measures using existing data, improvement of baseline descriptions and information, data needs for development of more outcome-oriented goals and measures, and plans to address data needs.

Performance measurement improvement is an ongoing and incremental pursuit at EPA. The rate of improvement progress is currently limited by data availability and quality. The state of our knowledge of environmental conditions, their dynamics, and the contribution of program interventions is a critical constraint in establishing realistic outcome-based performance measures and goals. The creation of EPA's new Office of Environmental Information will facilitate improvement of our national information base on environmental quality. As data gaps are filled, EPA will accelerate progress toward development of more outcome-based measures and goals.

IMPROVED PERFORMANCE MEASURES: NATIONAL PERFORMANCE MEASURES STRATEGY

Question. How is the Agency implementing the success of the National Performance Measures Strategy on an agency-wide basis?

Answer. The National Performance Measures Strategy was initiated in January of 1997 to develop and implement an enhanced set of performance measures for EPA's enforcement and compliance assurance program. The goals of the Measures Strategy included the adoption of the most effective combination of output, outcome and environmental indicator measures, within resource constraints. Furthermore, the Measures Strategy sought to develop performance measures that would improve EPA's ability to evaluate the effectiveness of its enforcement and compliance assurance program, manage that program more strategically, and achieve relevant Agency GPRA objectives.

As part of the development of the Measures Strategy, extensive consultation with stakeholders, regulatory partners, and internal managers and staff were held during the February-October 1997 timeframe to discuss issues and solicit ideas about development, use and implementation of enhanced performance measures. Through this effort, a framework of transparent, credible, feasible, functional and comprehensive output and outcome-based measures were identified and are referred to as the Performance Profile. Agency Workgroups facilitated the design phase which included developing definitions, identifying collection processes, and piloting certain measures.

To date, EPA's Office of Enforcement and Compliance Assurance has made great strides in implementing the Measures Strategy. Significant improvements have resulted in the form of numerous revised and new performance measures. However, it is important to note that the implementation of the Measures Strategy is not yet complete.

Although the measures developed through the Strategy were intended to apply only to EPA's enforcement and compliance assurance program, reports detailing the process undertaken have been widely disseminated throughout the Agency. Unfortunately, given the status of this effort as well as its limited applicability to other Agency programs, it is premature to attempt to assess the Agency's efforts in transferring the success of the Measures Strategy to other Agency programs.

COMPLIANCE ASSISTANCE FUNDING: FUNDING LEVEL DOLLARS AND FTES

Question. Provide the dollars and FTE under the Compliance Assistance and Centers key program in the Office of Enforcement and Compliance Assurance (OECA). In meeting this request, provide resource levels from the fiscal year 1999 budget request, fiscal year 1999 operating plan, fiscal year 1999 actuals, fiscal year 2000 budget request, proposed fiscal year 2000 operating plan, and fiscal year 2001 budget request. Organize the information by Appropriation, Goal, Objective, Sub-objective, Office or Region, and activity.

Answer. The attached spreadsheet provides resource information for OECA's compliance assistance key program. The information comes from the Agency's Budget Automation System (BAS). The resources requested for the fiscal year 1999 actuals and activity level information are not maintained in the Agency's key program data base.

COMPLIANCE ASSISTANCE FUNDING: FUNDING LEVEL DOLLARS AND FTES
(dollar amounts are in thousands)

	FY 1999 President's Request (BAS Version 2.1)		FY 1999 Enacted Operating Plan (BAS Version 11.1)		FY 2000 President's Request (BAS Version 1.0)		FY 2000 Enacted Operating Plan (BAS Versions 1.0 + 4.0)		FY 2001 President's Request (BAS Version 1.0)	
	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS
TOTAL:	**244.3**	**$24,375.9**	**243.3**	**$23,490.2**	**170.4**	**$18,397.2**	**214.8**	**$23,417.2**	**214.8**	**$24,438.1**
Headquarters:	39.8	$6,877.4	37.4	$6,059.6	39.5	$5,966.5	53.0	$8,959.1	53.0	$8,695.6
Regions:	204.5	$17,498.5	205.9	$17,430.6	130.9	$12,430.7	161.8	$14,458.1	161.8	$15,742.5
EPM:	**244.3**	**$24,375.9**	**240.7**	**$23,118.7**	**167.8**	**$17,865.5**	**212.2**	**$22,954.8**	**212.2**	**$24,039.7**
Headquarters:	39.8	$6,877.4	34.8	$5,688.1	36.9	$5,434.8	50.4	$8,496.7	50.4	$8,297.2
Regions:	204.5	$17,498.5	205.9	$17,430.6	130.9	$12,430.7	161.8	$14,458.1	161.8	$15,742.5
GOAL 5 OBJECTIVE 1							**4.0**	**$514.1**	**4.0**	**$445.6**
-- Office of Site Remediation Enforcement							4.0	$514.1	4.0	$445.6
GOAL 9 OBJECTIVE 2	**244.3**	**$24,375.9**	**240.7**	**$23,118.7**	**167.8**	**$17,865.5**	**208.2**	**$22,440.7**	**208.2**	**$23,594.1**
-- Office of Compliance	25.5	$3,825.9	25.5	$3,916.7	27.5	$3,882.1	22.9	$4,940.4	22.9	$4,258.6
-- Office of Regulatory Enforcement							16.7	$1,990.5	16.7	$2,085.5
-- Federal Facilities Enforcement Office	4.7	$1,408.3	5.1	$1,328.6	4.7	$797.6	3.1	$648.1	3.1	$753.2
-- Enforce. Capacity and Outreach Office	4.7	$662.3	4.2	$442.8	4.7	$755.1	3.7	$403.6	3.7	$422.2
-- Office of Planning and Policy Analysis	4.9	$980.9								
-- Immediate Office*										$332.1
-- Regions	204.5	$17,498.5	205.9	$17,430.6	130.9	$12,430.7	161.8	$14,458.1	161.8	$15,742.5

COMPLIANCE ASSISTANCE FUNDING: FUNDING LEVEL DOLLARS AND FTES
(dollar amounts are in thousands)

	FY 1999 President's Request (BAS Version 2.1)		FY 1999 Enacted Operating Plan (BAS Version 11.1)		FY 2000 President's Request (BAS Version 1.0)		FY 2000 Enacted Operating Plan (BAS Versions 1.0 + 4.0)		FY 2001 President's Request (BAS Version 1.0)	
	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS
OIL SPILLS RESPONSE:			**1.8**	**$274.8**	**1.8**	**$342.7**	**1.8**	**$353.4**	**1.8**	**$280.7**
Headquarters:			1.8	$274.8	1.8	$342.7	1.8	$353.4	1.8	$280.7
GOAL 5 OBJECTIVE 2			**1.8**	**$274.8**	**1.8**	**$342.7**	**1.8**	**$353.4**	**1.8**	**$280.7**
-- Office of Compliance			0.9	$91.7	0.9	$83.9	0.9	$112.5	0.9	$94.2
-- Office of Site Remediation Enforcement			0.9	$183.1	0.9	$258.8	0.9	$240.9	0.9	$186.5
SUPERFUND:			**0.8**	**$96.7**	**0.8**	**$189.0**	**0.8**	**$109.0**	**0.8**	**$117.7**
Headquarters:			0.8	$96.7	0.8	$189.0	0.8	$109.0	0.8	$117.7
GOAL 9 OBJECTIVE 2			**0.8**	**$96.7**	**0.8**	**$189.0**	**0.8**	**$109.0**	**0.8**	**$117.7**
-- Enforce. Capacity and Outreach Office			0.8	$96.7	0.8	$189.0	0.8	$109.0	0.8	$117.7

* In FY 2001, resources in the Immediate Office support this key program. Working capital fund dollars will be allocated across all key programs to reflect the total resources that support these programs.

PESTICIDES REREGISTRATION: FUNDING LEVEL DOLLARS AND FTES

Question. At what level, in terms of FTE and dollars, did the Agency Fund the Pesticide Reregistration key program in the fiscal year 1999 budget request, fiscal year 1999 operating plan, fiscal year 1999 actuals, fiscal year 2000 budget request, fiscal year 2000 proposed operating plan and fiscal year 2001 budget request? Provide the information by NPM, appropriation, goal, objective, sub-objective, office or region, and activity.

Answer. This information is provided in the following table:

[Dollars in millions]

Approp/Goal/Obj	Fiscal year 1999				Fiscal year 2000				Fiscal year 2001 Request	
	Request		Op. Plan		Request		Op. Plan			
	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars	FTE	Dollars
EPM:										
3.1	38.6	$3.2	38.6	$3.7	36.0	$3.6	36.2	$3.9	32.9	$4.3
3.2	125.1	$23.9	125.1	$20.7	134.7	$23.8	119.3	$19.4	120.4	$22.7
4.1	32.9	$4.5	32.9	$4.9	33.4	$4.6	31.1	$4.2	21.9	$2.7
7.2	37.9	$5.1	37.9	$5.9	40.3	$4.1	35.8	$4.0	36.9	$4.4
S&T:										
3.1	3.8	$1.0	3.8	$1.0	3.3	$0.7	4.0	$0.8	4.3	$0.8
3.2	10.9	$1.4	10.9	$1.5	9.9	$1.0	10.1	$1.2	8.2	$1.1
4.1	4.0	$0.3	4.0	$0.4	4.0	$0.3	3.5	$0.4	4.0	$0.4
FIFRA: 3.2	104.2	.....	104.2	.....	104.2	.....	104.2	.....	102.7	.....
Total All Approps.	357.4	$39.4	357.4	$38.1	365.8	$38.1	344.2	$33.9	331.3	$36.4

PESTICIDES REREGISTRATION: IMPACT OF FUNDING REDUCTION

Question. Analysis for the Agency's budget requests indicates that EPA reduced funding to the Pesticides Reregistration key program in the fiscal year 2000 proposed operating plan from the higher levels contained in the fiscal year 2000 budget request. Why did the Agency make this reduction and what impact did it have on the activity levels of the program?

Answer. EPA's fiscal year 2000 Operating Plan maintains the same level of program activity for reregistration as contained in the President's budget submission. The budget Congress enacted for EPA in fiscal year 2000 included a substantial General Reduction to the EPM account, including FTE reductions. At the same time, the implementation of the Food Qualify Protection Act is one of EPA's top priorities and we tried to increase and protect resources and activities programmed to carry out the Act. The slightly reduced 'key program' resources are the result of ongoing consolidation of the reregistration and FQPA's tolerance reassessment process, as well as a change in the schedule for setting up the registration review program. Moreover, we protected the primary components of FQPA, tolerance reassessments and the registration of safer substitutes and in fact these programs received more resources over fiscal year 1999 levels.

The Office of Prevention, Pesticides and Toxic Substances' (OPPTS) share of the general reduction was $18.3 Million. Also, OPPTS had to project some staff reduction in the reregistration program to comply with Congressional directions to cut Agency staff levels to 18,000 FTE. OPPTS has been under a hiring freeze since the beginning of the fiscal year and has been unable to protect the staff support for the registration and reregistration programs. As vacancies occur, we have not backfilled, resulting in declining FTE levels. The nature of work in both these programs is very FTE intensive and the skills are very specialized; in some cases it is impossible to shift from within to replace lost personnel. However, OPPTS' proposed operating plan for fiscal year 2000 minimizes the program impact of the general reduction as much as possible and we project no change in outputs.

Beyond cuts in staff, OPPTS reduced the funds budgeted to set up the Registration Review Program, the new FQPA requirement to review pesticide registrations every 15 years. The regulations establishing this program are proceeding and the cuts will not affect the establishment of the Registration Review program. In addition, the incorporation of some special review work into the tolerance reassessment process has streamlined the Special Review process, resulting in cost savings. We do not expect any reduced outputs from the reduction to the Special Review Programs.

Altogether, Congress directed EPA to fund the registration and reregistration programs at $68.9 Million. EPA's operating plan submitted to Congress funded these programs at $65.8 Million, a small reduction of $3.1 Million. This reduction resulted from the streamlinings and schedule changes described above. These revised levels also allowed us to lessen the impact of the general reductions on other critical EPA programs like the High Production Volume Chemical Challenge Program, which is collecting basic hazard information on chemicals the public routinely encounters.

EPA is confident that it fully carried out the intent of the Congressional directive to maintain a robust program to register, reregister and set food use tolerances using strict FQPA requirements. The fiscal year 2000 budget fully supports an aggressive effort to carry out these key programs.

QUALITY OF LAB DATA: CHICAGO CENTRAL REGIONAL LAB

Question. Why did EPA's initial responses to inquiries on the criminal investigation underway at the Chicago Central Regional Lab reveal that only 40 pollution cases were frozen because they may have been based, in part, on flawed lab test results when separate EPA court filings indicated that approximately 1,000 other cases . . . including judicial and administrative matters are being assessed for potential impact?

Answer. In the initial stage of our investigation, we estimated that we would have to review up to 1,000 cases to determine whether they involved analytical data generated or reviewed at the Central Regional Laboratory (CRL) by either Agency or contract personnel. That number represented the approximate number of open enforcement cases on the Region 5 docket. The Agency and the Department of Justice identified 43 cases on the DOJ "hot list" of active cases in which CRL involvement was verified or suspected and for which notice of such involvement has been provided to the court and the parties involved in the cases. At the same time, many of the other case files that had been examined did not reveal involvement on the part of the CRL Agency or contract staff under investigation. This review of open case files is an on-going process.

QUALITY OF LAB DATA: TESTS OF CONTAMINATED MATERIALS

Question. Why did the Agency downplay the role of the lab in public characterizations by saying that double-checks of materials analyzed by outside labs retained by polluters comprising 75 percent of the tests of contaminated materials from Midwest states were handled by Superfund staff and not the suspect lab? In reality court filings revealed the lab actually did validate analytical data from samples analyzed by outside laboratories.

Answer. More than 75 percent of Superfund cleanup activities are handled by Potentially Responsible Parties (PRPs), which includes any necessary laboratory analyses, which are carried out by the PRP's own contract laboratories. The data resulting from those analyses are neither reviewed nor validated by the CRL, except on a limited basis when requested by the Superfund program for oversight purposes. It is estimated that less than 1 percent of PRP data was reviewed or validated by CRL staff. In most matters not being carried out by PRPs, the Superfund program uses private laboratories that participate in the Contract Laboratory Program (CLP) to generate analytical data. These data are reviewed and validated by the Environmental Support and Analysis Team (ESAT) contractor with oversight by the Region 5 Superfund program office. This oversight consists of double checking the reviews conducted by the ESAT contractor to ensure that proper data validation procedures have been followed.

Data validation is a review of other laboratories' data to provide an opinion as to the usability of the data. The data validation process does not involve laboratory analytical work. It involves the review of a hard copy data package against an established set of Quality Assurance Criteria and Programmatic Data Objectives that are documented in a Quality Assurance Project Plan. Because the allegations which have been raised involve analytical work and not the expression of an opinion on another laboratory's work, the Agency does not believe that the reliability of such data has been impacted.

There is alleged misconduct in generating organic analytical data for certain types of chemical analyses within CRL. Typically, a hard copy results package for organic data does not contain electronic files for review. Electronic files of processed data are usually necessary to detect improper manipulation of data. Therefore, laboratory misconduct of this nature would have been detected through the data review or validation process for these packages. However, the Region will notify parties when one of the suspect analysts is identified as the data validator.

QUALITY OF LAB DATA—PROCESS TO IDENTIFY NON-ANALYSIS WORK PERFORMED

Question. Describe the process EPA is currently developing to identify those sites at which the lab or its contractor performed non-analytical work, and any results of the process to date.

Answer. EPA is relying on time charges submitted by the suspect analysts to determine the work they performed, including whether they were involved in non-analytical work which includes the review of outside laboratories' data (data validation work). The EPA employees were required to bill time to individual sites on which they worked. In addition, the CRL's receiving logs were used to track information regarding documents from outside laboratories. The information tracked included the site name, time received and the data set number assigned to the data from the outside lab. This process continued from about 1981 through 1990. By 1990, the Environmental Support and Analysis Team (ESAT) contractor had taken over the data validation work and EPA employees were not involved. Also information has been extracted from another tracking data base covering data review when it was performed by EPA employees. It identifies the review of data according to EPA employee initials. These different data bases will be used to determine which data sets were reviewed by the suspect analysts.

The ESAT time charges by employee have been summarized in data bases. The summaries provide information by site as to when the work took place, the name of the suspect analysts, hours charged, and the type of work involved. This information is being used to determine the involvement of the suspect contractor personnel.

Where the suspect analysts have worked on data validation, information on the site and work performed is to be provided to courts, parties, and identified potentially responsible parties. Notice is being provided to parties to ensure that there is no question as to the government's forthrightness in disclosures regarding this matter.

QUALITY OF LAB DATA: AGENCY REACTION TO NEWS REPORT ON LAB

Question. Why did EPA wait until newspaper stories publicized the criminal investigation underway at the Chicago lab before transferring the troubled lab's director?

Answer. The transfer of the Central Regional Laboratory (CRL) Director was independent of the timing of any publication of CRL-related stories in the press. Regional management decided to reassign the CRL Director to other duties once the corrective actions recommended by the Office of Inspector General and the Technical Audit Team were substantially completed. The reassignment became effective March 6 and the completion of the recommendations led to the CRL reopening March 16.

QUALITY OF LAB DATA

Question. EPA states that it is establishing new quality policies and providing training for staff to correct the lab's problems. But these steps don't seem to address the reason for the fraud, that being a desire to even-out busy spikes of workload. What is the Agency doing to deal with the actual cause of the problems?

Answer. The Regional laboratories have developed training on acceptable conduct in laboratories, including an emphasis on activities that are considered inappropriate behavior. The laboratories are also conducting detailed audits of their management processes and technical operations to ensure that proper systems are in place and are effective in ensuring that the analytical results are of known and documented quality. Management at all the laboratories are monitoring the analytical work at their laboratories and are taking steps to more closely control the workload and even-out workflow.

NPDES: FUNDING LEVEL DOLLARS AND FTES

Question. At what level, in terms of FTE and dollars, did the Agency fund the NPDES Program key program in the fiscal year 1999 budget request, fiscal year 1999 operating plan, fiscal year 1999 actuals, fiscal year 2000 budget request, fiscal year 2000 proposed operating plan, and fiscal year 2001 budget request. Provide the information by NPM, appropriation, goal, objective, sub-objective, office or region, and activity.

Answer. Agency funding of the NPDES key program is detailed below.

OFFICE OF WATER [1]

Fiscal year	Dollars	FTE
1999:		
Budget Request	$43,408,500	338.0
Operating Plan	$30,862,600	[2] 294.1
2000:		
Budget Request	$46,338,800	350.5
Proposed Operating Plan	$36,274,900	[2] 329.7
2001: Budget Request	$41,592,000	[2] 327.5

[1] Appropriation: EPM; Goal 2: Clean and Safe Water; Objective 3: Reduce Loadings and Air Deposition.
[2] Reflects a realignment of Regional workyear distributions to reflect a more accurate depiction of the national water program workforce.

NPDES: EXPIRED PERMIT BACKLOG

Question. The Agency declared to the President that backlogs in the NPDES permitting program were a material management weakness and developed a plan to reduce the backlog down to 10 percent in December 2001. EPA recently disclosed that the backlog is instead increasing. Why is the backlog in expired permits in states and territories whose water programs are run by EPA increasing and forecast to reach to 44 percent in December 2001?

Answer. The Agency has identified the backlog of expired National Pollutant Discharge Elimination System (NPDES) permits as a material weakness under the Federal Managers Financial Integrity Act (FMFIA) and has established a goal of reducing the backlog of individual permits issued to major facilities to 10 percent, or less, by December 31, 2001.

Based on NPDES permit backlog data collected between November 1998 and March 2000, the national backlog of expired NPDES permits for major facilities (including both State- and EPA-issued permits) has increased from approximately 26 percent to 28 percent. The increase in the national backlog rate is due to an increase from 24 to 26 percent in the backlog of State-issued NPDES permits, which comprise approximately 90 percent of the permitted facilities. Over this same period, the backlog of permits for major facilities where EPA administers the NPDES program has decreased from 46 percent to 41 percent. These data, noting the increasing backlog trend at the national level, have been provided to House and Senate committees on a quarterly basis since March 1999. The Agency does not project a 44 percent backlog of EPA-issued permits in December 2001. Intensive efforts are currently underway at EPA Regional offices in support of achievement of our national target of 10 percent for December 2001.

NPDES: ACTIONS TO REDUCE BACKLOG

Question. Why have EPA's actions to reduce the backlog in programs run by EPA failed to produce reductions in the backlog?

Answer. Between November 1998 and March 2000, the backlog of National Pollutant Discharge Elimination System (NPDES) permits for major facilities where EPA is responsible for permit issuance has been reduced from 46 percent to 41 percent. While the backlog rate is falling, the Agency believes that it remains unacceptably high and has taken steps to reduce it to meet the 10 percent target over the next 20 months. The Agency's analysis of the causes of the permit backlog and our strategy for addressing the problem is presented in the Interim Framework to Ensure Issuance of Timely and High Quality NPDES Permits (Approaches for Reducing the NPDES Permit Backlog)—July 28, 1999. This document provides the Agency's vision for both short and long term strategic objectives for backlog reduction, and is available for downloading on our web site [www.epa.gov/owm/permits/backlog/backlog.htm].

NPDES: STATE COMPLIANCE TO REDUCE BACKLOG

Question. Why are only 15 states on track to meet the Agency's goal of reducing the NPDES permit backlog to 10 percent? Why have EPA's actions to reduce the backlog in delegated programs failed to produce reductions in the backlog?

Answer. While the Agency is directly responsible for National Pollutant Discharge Elimination System (NPDES) permit issuance in seven states and all U.S. Territories (except the U.S. Virgin Islands), this represents only about 10 percent of all NPDES permits issued. For the remaining ANPDES authorized states, EPA acts

only as an oversight authority. While some authorized states have been able to maintain successful permit issuance rates (i.e., below 10 percent backlog), the majority have encountered resource, technical, and administrative obstacles similar to EPA Regions.

The Agency has identified a variety of potential causes for the current backlog of expired NPDES permits, and for the increase in the backlog of State-issued permits for major facilities. Based on discussions with EPA Regional and State permitting managers, the following causes of the backlog were provided in our Interim Framework to Ensure Issuance of Timely and High Quality NPDES Permits (Approaches for Reducing the NPDES Permit Backlog)—July 28, 1999:

—The universe of facilities requiring NPDES permit coverage (e.g., storm water SSOs/CSOs, CAFOs) is expanding at the same time that previously issued permits are expiring.

—State environmental agencies are challenged by implementing other competing regulations (e.g., air, solid waste, drinking water).

—NPDES permits have become increasingly complex due to State adoption of numeric water quality standards and TMDL requirements. Effluent guidelines have been promulgated for industrial operations that are increasingly complex.

—In many cases, permit writers today need training in complex technical and regulatory matters to issue high quality permits. Due to decreasing permit resources and movement of staff to other program areas, it has been difficult for States and Regions to maintain technical experts on their permits staff.

—States have begun shifting to a watershed approach for permit issuance, which may increase backlogs for the first few years to allow alignment of five-year permit cycles within watershed boundaries.

To address these issues, the Agency's Acting Deputy Administrator, W. Michael McCabe, issued a memorandum on March 31, 2000, to each of the EPA Regional Administrators requesting State-specific backlog reduction plans for both authorized and non-authorized States and Territories. The intent of these plans, which are due by May 15, 2000, is to identify the actions that the Region or State must take to reduce the permit backlogs and meet the 2001 and 2004 backlog reduction targets. To adequately develop these plans, the Region must fully assess the backlog of both State and EPA-issued permits (for major and minor facilities) and actively engage authorized States in establishing permit issuance commitments.

NPDES: IMPACT OF FUNDING REDUCTION

Question. Analysis of the agency's budget requests indicates that EPA reduced funding to the NPDES program in the fiscal year 1999 operating plan and the fiscal year 2000 proposed operating plan from the higher levels contained in each years budget request. Why did the Agency make reductions in NPDES program from each of these budget requests to the following operating plans and what impact did it have on the activity levels of the program?

Answer. Reductions to NPDES activities resulted from the requirement to absorb the general reductions included in the fiscal year 1999 and fiscal year 2000 Environmental Programs and Management appropriation. Resources devoted to reducing the NPDES permit backlog were not reduced during the development of either operating plan. Impacts of the NPDES cuts included eliminating funding for additional Clean Water Action Plan workyears; limiting guidance and support to states and communities implementing storm water controls; curtailing EPA efforts to work with other Federal and state agencies, tribes, and private entities to cleanup watersheds affected by mines; hampering implementation of the Animal Feeding Operation (AFO) Strategy and curtailing support for the development of guidance with USDA on how 450,000 AFOs should manage over 1.37 billion tons of animal waste; and hampering efforts to study the effectiveness of approaches to implementing best management practices (BMPs) for silviculture.

FINANCIAL STATEMENTS

Question. The Agency recently received a qualified opinion for its most recent financial statements. This follows the previous year where six months of assistance from the Office of Inspector General was required to get EPA's statements in a state to earn an unqualified opinion. What steps is the Agency taking to train its financial management staff to better perform the task of annually preparing financial statements?

Answer. For our prior year financial statements, the OIG did cooperate in giving the Agency additional time in completing its financial statements. The number of resources available to compile the statements was more of the contributing factor

then skill competency. The issues that caused the delay for our 1998 statements were addressed and were not the same contributing factors for 1999.

As indicated in our answer to an earlier question titled "FINANCIAL AUDIT: IG OPINION", the Inspector General qualified its opinion on the Agency's 1999 financial statements based on two technical accounting issues that were highlighted late in the audit process and consequently could not be resolved by the statutory due date of March 1. We have in place a plan to further improve our quality control process for producing our financial statements. This will include system and process changes. We also plan to use contractor support to supplement EPA staff in performing technical analyses as needed. In addition, we have had discussion with the OIG regarding the number and level of technical expertise that they have assigned to the audit to prevent delays in receiving audit feedback to allow for statement adjustments.

Our plan also includes staff training. We are committed to providing our staff with the tools and on-going training necessary to produce reliable and timely financial statements. We have sent key staff to financial statement and general ledger training, engaged an accounting expert from the Treasury Department to review our books and train our staff on analytical techniques, and plan to send key staff to project management training to help better plan and coordinate with the auditors.

FINANCIAL STATEMENTS: ACCOUNTING AND RECORDKEEPING PROCESS

Question. What steps is the Agency taking to change accounting, recordkeeping or other charging processes to enable the Agency to more accurately and quickly prepare sound financial statements?

Answer. We are implementing systemic solutions to streamline the preparation and audit of annual financial statements. We are changing how we record certain detailed transactions to a way that facilitates year-end reporting; we are also taking steps to increase the amount of effort devoted to ongoing review and analysis of our accounting records. We believe this additional focus on quality assurance can facilitate the preparation and audit of the year-end financial statements by resolving potential issues during the year, rather than late in the audit. Finally, we have implemented a new financial data warehouse reporting tool that makes a great deal of current and historical financial information available to EPA management on a near real-time interactive basis.

FINANCIAL STATEMENTS

Question. Why is the Agency reducing funding for the Financial Statement Audits key program in fiscal year 2001 if the Agency's financial statements have worsened over the last year?

Answer. The Office of the Inspector General (OIG) has audited EPA's financial statements since 1992. During that time, the OIG has spent considerable resources identifying areas for improvement in EPA's systems and controls and working with the Agency to improve the accuracy and timeliness of its financial information. Internal control and compliance issues identified by the OIG have existed for a number of years, and the OIG has worked extensively with the Agency to resolve these.

At this point, the OIG believes its role in identifying and recommending needed systems improvements is complete. It is incumbent upon the Agency to implement the OIG's recommended corrective actions, so that accurate data is available to prepare the annual financial statements and to manage the Agency's environmental program on an ongoing basis. Therefore, the funding request was slightly reduced and the OIG believes that this will maintain the resources necessary to perform the audit.

ROOT CAUSE ANALYSIS PILOT PROJECT: INDUSTRY-SPONSORED TRAINING ON "HOW CHEMICAL PLANTS WORK"

Question. Provide the status of any efforts to develop industry-sponsored training on "how chemical plants work" for staff of regulatory agencies as recommended in the EPA/CMA Root Cause Analysis Pilot Project.

Answer. Developing industry-sponsored training on "how chemical plants work" was not a formal recommendation of the Root Cause project. It was an idea offered by an industry representative on the project team. Although the Agency recognizes merit in such training, there are currently not resources available for such a project.

ROOT CAUSE ANALYSIS PILOT PROJECT: INDUSTRY-EPA PERSONNEL EXCHANGE PROGRAM

Question. Provide the status of any efforts to develop an industry-EPA personnel exchange program as recommended by the Root Cause project.

Answer. Developing an industry-EPA personnel exchange was not a formal recommendation of the Root Cause project. It was an idea offered by an industry representative on the project team. Although the Agency recognizes merit in such exchange programs, there are currently no resources available for such a program.

ROOT CAUSE ANALYSIS PILOT PROJECT: DEVELOPMENT OF INSPECTION PROGRAM

Question. Provide the status of any efforts to develop an inspection program under which technical assistance inspections are conducted routinely in advance of traditional enforcement inspections, particularly in the case of new rules as recommended by the Root Cause project.

Answer. Developing such an inspection program was not a formal recommendation of the Root Cause project. It was an idea offered by an industry representative on the project team.

Although EPA has no plans to develop the level of inspection program described in this question, EPA has often implemented compliance assistance activities in advance of enforcement initiatives. One recent example is the minimill initiative in Region V. Region V used an integrated sector-based approach to improve compliance among the minimills in its six states, focusing on Electric Arc Furnaces (EAFs). First, the Region identified relevant minimills, contacted industry groups and sent out a notification letter to the minimills concerning the initiative. Each mill had the opportunity to carry out a self-audit within a six-month period after being contacted. Any identified violations were to be handled using EPA's Audit Policy. During the six month period, the Region conducted compliance assistance activities including: a kick-off meeting, a web page on the Internet dedicated to the initiative, telephone and E-mail access to EPA staff, EPA presentations at two conferences, coordination with State agencies to assure consistency and correspondence and meetings with individual companies. Out of 22 minimills, ten minimills self-disclosed findings based on self-audits. One facility self-disclosed without submitting an audit. Most reported violations were minor and did not result in penalties. At the end of the 6 month period, Region V began investigations of the remaining minimills to pursue enforcement, if appropriate.

In addition, on-site compliance assistance is routinely provided to facilities through on-site compliance assistance visits and EPA inspectors. For example, inspectors routinely share standardized information and references with facilities during traditional inspections including: copies of requirements; guidance documents; manuals and technology transfer documents; information on other assistance providers; information on control practices and equipment used within a specific sector to comply with environmental regulations; pollution prevention literature; and suggestions on simple techniques and concepts to reduce or eliminate pollution. In some cases, inspectors may provide information on compliance status; information and insight into a facilities particular problem and what might be evaluated to remedy the problem; and technical assistance on recognized industry or sector-based practices and concepts to reduce or eliminate pollution. For more specific or technical information, inspectors are encouraged to refer facilities to appropriate technical assistance programs, including the Compliance Assistance Centers, Small Business Assistance Programs, and Manufacturing Extension Partnerships.

ROOT CAUSE ANALYSIS PILOT PROJECT: COMPLIANCE "GRACE PERIOD"

Question. What is the Agency's reaction to the Root Cause report recommendation to allow facilities a "grace period" for compliance with new regulations and does the Agency have any efforts underway to test, pilot or implement this recommendation?

Answer. Allowing facilities a "grace period" for compliance with new regulations was not a formal recommendation of the Root Cause project. It was an idea offered by an industry representative on the project team. While EPA does not generally offer a "grace period" for compliance with new regulations, for certain rules, the Agency has formally established a dedicated compliance assistance period before it undertakes enforcement, such as in the lead-based paint Sections 1018 and 406 programs.

In addition, EPA routinely provides ample opportunity for facilities to become familiar with and implement new regulatory requirements. In developing and implementing rules promulgated under the 1990 Clean Air Act Amendments (CAA), the agency has consistently been sensitive to providing the regulated community ample time to become familiar with the new regulatory requirements and make whatever operational adjustments are necessary to be in compliance. Sources which existed prior to the proposal of new CAA rules are given up to 3 years after the effective date to comply. Sources may also be granted an additional year to comply if additional time is necessary to install pollution control equipment.

The Agency has also focused considerable effort on the development of compliance assistance material to facilitate compliance with new rules. In particular, the Agency is committed to early development of compliance assistance tools to provide the regulated community the information it needs to comply with regulatory requirements. In fact, the Agency's Action Plan for Innovation commits EPA to issuing compliance assistance materials for new economically significant regulations typically within 90 days of final rule promulgation.

The Agency has also focused compliance assistance resources on rules that apply to small businesses. Even after the compliance date of a new regulation, the Agency continues to work proactively with the regulated community to ensure that small businesses understand their new regulatory requirements. EPA has also offered the regulated community opportunities through self disclosure and small business policies to disclose violations with, in most cases, no penalties and also provides small businesses with access to compliance assistance resources.

ROOT CAUSE ANALYSIS PILOT PROJECT: COORDINATION BETWEEN EPA AND FACILITY

Question. What is the Agency's reaction to the Root Cause report recommendation to designate a single EPA contact to work with each facility to coordinate EPA regulatory activities and provide assistance and does the Agency have any efforts underway to test, pilot or implement this recommendation?

Answer. Designating a single EPA contact to work with each facility to coordinate EPA regulatory activities and provide assistance was not a formal recommendation of the Root Cause project. It was an idea offered by an industry representative on the project team. Although resource levels limit the Agency's ability to designate individual staff to work with each regulated facility, EPA has undertaken many efforts in the last several years to provide more compliance assistance to regulated facilities and industries. For example, EPA has partnered with industry, academia, and nonprofit groups to launch the ten sector-specific compliance assistance centers to serve as the "first-stop-shop" for compliance assistance. In addition, the creation of the National Compliance Assistance Clearing House will enable regulated entities to easily identify and access available compliance assistance material.

ROOT CAUSE ANALYSIS PILOT PROJECT: TECHNICAL ASSISTANCE OR MITIGATION

Question. What is the Agency's reaction to the Root Cause report recommendation to allow and encourage EPA inspectors to (1) provide technical assistance and (2) mitigate or omit penalties for noncompliance events that are addressed in a timely manner and does the Agency have any efforts underway to test, pilot or implement this recommendation?

Answer. Encouraging inspectors to provide assistance and to mitigate or omit noncompliance was not a formal recommendation of the Root Cause project. It was an idea offered by an industry representative on the project team. Inspectors routinely share standardized information and references with facilities during traditional inspections. These materials include: copies of regulatory requirements; guidance documents; manuals and technology transfer documents; information on other assistance providers; information on control practices and equipment used within a specific sector to comply with environmental regulations; pollution prevention literature; and suggestions on simple techniques and concepts to reduce or eliminate pollution. In some cases, inspectors may also provide more facility- or industry-specific information such as: information on compliance status; information providing analysis of a facility's particular problem and what remedies might be appropriate; and technical assistance on recognized industry or sector-based practices and concepts to reduce or eliminate pollution. For more specific or technical information, inspectors are encouraged to refer facilities to appropriate technical assistance programs, including the Compliance Assistance Centers, Small Business Assistance Programs, and Manufacturing Extension Partnerships.

EPA's penalty policies do allow penalties to be mitigated based on a variety of factors, including:

—the degree of cooperation in remedying the noncompliance—in cases where violations are addressed immediately upon discovery, EPA's penalty policy allows for a substantial portion of the unadjusted gravity component to be reduced;

—the level of sophistication within the industry in dealing with the compliance issue; and

—ability to pay.

In addition, EPA's "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations" and "Small Business Compliance Policy" offer facilities the opportunity to discover, disclose, and correct regulatory noncompliance. Both policies encourage companies and other regulated entities to voluntarily discover,

disclose, correct and prevent violations of Federal environmental requirements. Entities that meet policy conditions are eligible for penalty reductions (including penalty waivers) and other benefits. To date, over 750 entities have disclosed violations at over 2,750 facilities under the two self-disclosure policies.

ROOT CAUSE ANALYSIS PILOT PROJECT: COMPREHENSIVE VS. INDIVIDUAL EVALUATION

Question. What is the Agency's reaction to the Root Cause report recommendation to redirect inspectors from a focus on individual noncompliance events to a more comprehensive evaluation of the effectiveness of a facility's systems for protecting the environment and does the Agency have any efforts underway to test, pilot or implement this recommendation?

Answer. Shifting the focus of compliance inspectors was not a formal recommendation of the Root Cause project. It was an idea offered by an industry representative on the project team.

However, as resources and expertise allow, EPA has conducted Environmental Management Systems inspections and Environmental Management Reviews (EMR). For example, EPA's Federal Facility Enforcement Office (FFEO) conducted a 2-year pilot program of conducting environmental management Reviews (EMRs) at Federal facilities. An EMR is an on-site review of selected aspects of a facility's environmental management program and policies in accordance with the Code of Environmental management principles for Federal Agencies (CEMP), an EMS-based set of principles similar to ISO 14001. These EMRs are conducted by following the EMR Policy and Guidance which contains an Incidental Violations Response Policy which is a hybrid of the EPA Small Business and Audit Policies. During the 2-year pilot program, EPA Regions conducted 29 EMRs at facilities of 20 different federal agencies. Federal facilities have been very receptive to the EMRs and have made numerous management and good practice changes based on EMR report recommendations. FFEO has issued a national report on the pilot program and is currently conducting a follow-up study and facility survey to document improvements made as a result of these EMSs.

In July, 1999 EPA, after extensive consultations with a variety of outside stakeholders, released a major report from our Innovations Task Force, "Aiming for Excellence: Actions to Encourage Stewardship and Accelerate Environmental Progress." In this report EPA commits to promoting the use of environmental management systems. Specifically, the report states that EPA will:

—encourage organizations to adopt EMSs that improve compliance, prevent pollution, and use other measures of environmental performance;

—continue our efforts to learn more about how EMSs can complement existing environmental programs and policies; and

—evaluate how EMSs, in the long-term, might help bring about changes in public policy.

As a result, EPA has developed an EMS action plan (currently in draft) that sets out the steps EPA will take to fulfill this commitment. EPA has held meetings with various stakeholder groups to facilitate discussion of the plan and expects to have it finalized in the near future. The entire draft action plan can be located electronically at www.epa.gov/ems.

ROOT CAUSE ANALYSIS PILOT PROJECT: COORDINATION BETWEEN EPA AND STATES ON REGULATORY REQUIREMENTS

Question. What is the Agency's reaction to the Root Cause report recommendation to improve coordination between EPA and states regarding the interpretation of regulatory requirements and does the Agency have any efforts underway to test, pilot or implement this recommendation?

Answer. EPA routinely works with states to develop and distribute uniform guidance on individual rules and on categories of regulations. Through interaction between EPA program offices, state environmental agencies, and media-specific associations, interpretations issues are identified and addressed.

Several tools are also available to support consistent interpretation of regulatory requirements. Through Agency funded hotlines, federal regulatory determinations are easily accessed. In addition, EPA has created the Applicability Determination Index (ADI)—a searchable database of hundreds of Clean Air Act regulatory determinations. Lastly, the Agency is creating a national compliance assistance clearinghouse that will further facilitate coordination between EPA and the states.

Finally, state regulations and state contacts are easily accessible through the Compliance Assistance Centers. As part of the Centers program, the Environmental Council of States (ECOS) has actively partnered with the Local Government Envi-

ronmental Association Network (Center for local government officials) promoting interaction between the state, local and federal governments.

ROOT CAUSE ANALYSIS PILOT PROJECT: STAKEHOLDERS FOCUS GROUPS

Question. What is the Agency's reaction to the Root Cause report recommendation to create focus groups representing all stakeholders during early stages of revision of rules and does the Agency have any efforts underway to test, pilot or implement this recommendation?

Answer. Convening focus groups during early stages of rule revision was not a formal recommendation adopted in the Root Cause project. It was an idea offered by an industry representative on the project team. Early and interactive stakeholder involvement is a cornerstone of the Agency's sector program's approach and is also a cornerstone of the Agency's approach to regulatory development. For example, consultation with small business advisory panels and federal advisory committees are integral to the Agency's regulatory development process.

The Agency's sustainable industry program in particular is designed to build knowledge of stakeholder perspectives as a means of identifying worthwhile policy and programmatic changes in regulatory standards and other areas, to achieve better compliance, promote beyond-compliance stewardship, and to do so with minimum possible burden on the regulated community and regulators. For example, sector participation in the sustainable industry program has prompted regulatory changes for the metal finishing industry in RCRA, for chrome in the Clean Air Act (CAA), and for Metal Products & Machinery effluent guidelines. In addition, EPA is seeking public feedback on new regulatory projects such as the Persistent Bioaccumulative Toxics (PBT) initiative.

ROOT CAUSE ANALYSIS PILOT PROJECT: PILOT TEST PROGRAM

Question. What is the Agency's reaction to the recommendation recorded by the Root Cause report to pilot-test a program similar to OSHA's "Nationwide Quick-Fix Program", which offers reductions of penalties to employers that immediately abate hazardous identified during an OSHA inspection and does the Agency have any efforts underway to test, pilot or implement this recommendation?

Answer. Pilot-testing a "Quick Fix" program was not a formal recommendation adopted in the Root Cause project. It was an idea offered by an industry representative on the project team. In the response to a previous question, we noted that EPA's penalty policies allow penalties to be mitigated in certain situations, and we noted the factors that determine whether mitigation is appropriate in a particular situation. We also referenced the Agency's self-audit and small business policies. The Agency believes these initiatives offer appropriate types of flexibility. There are no plans to adopt the OSHA approach.

ROOT CAUSE ANALYSIS PILOT PROJECT: FEASIBILITY PILOT-TEST PROGRAM

Question. What is the Agency's reaction to the Root Cause report recommendation to work with industry to pilot-test the feasibility of new rule before the are promulgated and does the Agency have any efforts underway to test, pilot or implement this recommendation?

Answer. Pilot-testing of new rules was not a formal recommendation adopted in the Root Cause project. It was an idea offered by an industry representative on the project team. The Agency has committed to field testing certain draft regulations prior to promulgation in its "Aiming for Excellence" report. The field testing will be conducted through a simulated trial application of a draft rule with one or more regulated entities, with opportunity for public involvement.

Furthermore, on-going Agency activities do allow industry pilot-testing to affect regulatory requirements. For example, the Agency's metal finishing sector program tested low cost pollution prevention technologies to reduce chrome emissions in a project that was defined and validated by an early focus group. The results of a successful research and development test may lead to changes in the Chrome Clean Air Act MACT standards and allow the use of the tested technology. In essence, this initiative road tested an approach that identified what, if any, regulatory change was appropriate.

Similarly, the sustainable industry sectors approach discussed above: (1) develops a base of knowledge and stakeholder understanding; (2) determines which ideas should be tested; and then (3) defines, if any, appropriate programmatic and/or regulatory changes. This approach has worked well in the metal finishing sector, and it is being implemented in other sectors.

ENFORCEMENT TARGETING

Question. How are EPA's efforts to strategically target its enforcement and compliance activities allowing the Agency to address the most significant risks to human health and the environment and to address disproportionate burden on certain populations?

Answer. The Office of Enforcement and Compliance Assurance (OECA) has developed several tools for strategic targeting of enforcement and compliance resources by headquarters and regional programs to address human health and environmental risks and areas which may have disproportionately exposed populations. The use of these tools is leading to identification of important environmental risks and noncompliance patterns. For example, the selection of two industry sectors (Petroleum Refining and Metal Services) as OECA priorities for inclusion in the fiscal year 2000/2001 Memoranda of Agreement (MOA) was based on an analysis of industrial sectors that took into account inspection coverage, violation rates, emissions data, and the views of state regulatory partners. Another OECA-developed targeting tool incorporates interactive mapping techniques to allow users to look at facilities in stressed areas (e.g., a priority watershed), near schools, in minority communities, or other relevant factors. By combining various types of information and using appropriate technologies, the Agency is able to improve its ability to target compliance and enforcement resources at the most important problems.

ENFORCEMENT TARGETING: PURPOSE AND SUPPORT TARGET ACTIVITIES

Question. Describe the different targeting activities in which the enforcement targeting program is engaged including their purpose and support of the Agency's goals and performance measures.

Answer. The Office of Enforcement and Compliance Assurance (OECA) engages in a broad range of both strategic and tactical enforcement targeting activities in support of Agency goals. OECA uses data strategically from across the Agency's programs and from external sources where possible to identify environmental risks or noncompliance patterns which may warrant intervention. Identifying these problems leads to further analysis and can result in a variety of responses, from declaring an industry sector a multi-year priority to be addressed by a variety of tools, to dispatching compliance assistance staff or an inspector to one or more facilities. By targeting our compliance and enforcement resources at important problems we align those resources with EPA goals and we can use performance measures to track progress and adjust strategies for maximum impact.

ENFORCEMENT TARGETING: DATA/INFORMATION SYSTEMS PROGRAM FUNDING LEVELS

Question. Provide funding levels in terms of dollars and FTE, for all activities under the Data/Information Systems program component of the Office of Enforcement and Compliance Assurance (OECA) in the fiscal year 1999 budget request, fiscal year 1999 operating plan, fiscal year 1999 actuals, fiscal year 2000 budget request, fiscal year 2000 proposed operating plan, and fiscal year 2001 budget request. Provide the information by appropriation, goal, objective, sub-objective, office or region, and activity. Ensure that targeting activities are labeled and differentiated from other data/information systems activities.

Answer. The attached spreadsheet provides resource information for OECA's data and information efforts. The information comes from the Agency's Budget Automation System (BAS). The budget activities on the table are used primarily in budget formulation. The resources requested for the fiscal year 1999 actuals are not maintained in the Agency's database.

OECA does not specifically identify targeting activities under this program. Targeting work supports the compliance assistance and compliance monitoring programs. However, the Integrated Data Enforcement Analysis (IDEA) system can be used for several purposes...targeting, public access to name two. These resources are located under the Office of Compliance's budget in Goal 7.

ENFORCEMENT TARGETING: DATA/INFORMATION SYSTEMS PROGRAM FUNDING LEVELS
(dollar amounts are in thousands)

	FY 1999 President's Request (BAS Version 2.1)		FY 1999 Enacted Operating Plan (BAS Version 11.1)		FY 2000 President's Request (BAS Version 1.0)		FY 2000 Enacted Operating Plan (BAS Versions 1.0 + 4.0)		FY 2001 President's Request (BAS Version 1.0)	
	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS
TOTAL:	124.2	$14,092.0	133.7	$15,525.7	126.0	$15,991.2	113.2	$13,829.0	118.5	$17,219.4
Headquarters:	52.2	$8,759.5	63.2	$10,302.7	54.0	$10,513.0	44.8	$8,402.0	52.8	$11,626.1
Regions:	72.0	$5,332.5	70.5	$5,223.0	72.0	$5,478.2	68.4	$5,427.0	65.7	$5,593.3
EPM:	121.7	$13,154.0	130.8	$14,143.8	123.1	$15,078.1	110.5	$12,717.6	115.8	$16,155.7
Headquarters:	49.7	$7,821.5	60.3	$8,920.8	51.1	$9,599.9	42.1	$7,290.6	50.1	$10,562.4
Regions:	72.0	$5,332.5	70.5	$5,223.0	72.0	$5,478.2	68.4	$5,427.0	65.7	$5,593.3
GOAL 7 OBJECTIVE 1 SUBOBJECTIVE 2	9.7	$1,815.6	9.1	$2,373.0	20.0	$3,439.4	12.9	$2,468.2	10.9	$2,721.9
-- **Office of Compliance**	2.3	$1,170.4	2.3	$1,418.3	11.2	$2,380.9	8.9	$1,868.6	6.9	$2,100.6
Systems Development - Multimedia				$50.0			3.2	$439.6	3.2	$792.4
Systems Operations & Maintenance - Multimedia				$631.6			4.2	$913.1	3.2	$1,148.5
Public Access	2.3	$1,170.4	2.3	$736.7	11.2	$2,380.6	1.5	$515.9	0.5	$159.7
-- **Office of Regulatory Enforcement**					1.0	$188.7				
Public Access					1.0	$188.7				
-- **Enforcement Capacity and Outreach Office**	4.9	$466.2	5.4	$814.5	4.9	$544.8	4.4	$506.6	4.0	$590.6
Public Access	4.9	$466.2	5.4	$814.5	4.9	$544.8	4.4	$506.6	4.0	$590.6
-- **Office of Policy, Planning and Analysis**			0.4	$70.7	0.4	$138.0				
Public Access			0.4	$70.7	0.4	$138.0				
-- **Immediate Office**										$30.7
Working Capital Fund										$30.7
-- **Regions**	2.5	$179.0	1.0	$69.5	2.5	$187.0	0.6	$93.6		
Public Access	2.5	$179.0	1.0	$69.5	2.5	$187.0	0.6	$93.6		
Working Capital Fund										
GOAL 9 OBJECTIVE 1 SUBOBJECTIVE 2	112.0	$11,338.4	121.7	$11,770.8	103.1	$11,638.7	96.6	$10,249.4	104.9	$13,433.8
-- **Office of Compliance**	42.5	$6,164.9	52.2	$6,617.3	33.6	$6,347.5	28.8	$4,916.2	38.2	$7,617.9
System Development - Air	1.4	$554.4	1.4	$121.4	1.4	$328.6	1.4	$37.4	1.4	$41.1
System Development - Water Quality	0.7	$466.5	0.7	$492.4	0.7	$519.0	1.5	$450.4	4.5	$836.3
System Development - Drinking Water	1.0	$90.1	1.0	$90.1	1.0	$242.0	0.5	$46.8	0.5	$103.0
System Development - Hazardous Waste	1.4	$223.5	1.4	$271.4	1.4	$438.3	0.5	$46.8	0.5	$88.0
System Development - Pesticides	0.2	$20.0	0.2	$70.0	0.2	$125.8	0.2	$18.7	0.2	$20.5
System Development - Toxic Substances	0.2	$20.0	0.2	$70.0	0.2	$125.9	0.2	$18.7	0.2	$20.5
System Development - Multimedia	7.8	$881.5	7.8	$693.9	2.8	$861.2	5.3	$841.1	7.3	$2,973.3
System Operations and Maintenance - Air	2.6	$819.7	2.7	$512.2	2.6	$579.4	1.6	$329.8	1.6	$382.0
System Operations and Maintenance - Water Quality	10.9	$1,159.5	11.3	$1,214.5	10.9	$1,203.6	8.9	$846.1	8.9	$938.2
System Operations and Maintenance - Drinking Water	1.6	$140.2	1.6	$138.7	1.6	$146.4	1.6	$149.8	1.6	$156.3
System Operations and Maintenance - Haz. Waste	3.5	$455.4	3.8	$528.4	3.5	$562.0	1.3	$331.7	2.3	$387.0
System Operations and Maintenance - Pesticides	1.7	$235.5	1.7	$444.4	1.7	$330.6	0.7	$164.5	0.7	$134.2
System Operations and Maintenance - EPCRA	0.3	$30.0	0.3	$30.0	0.3	$31.2				
System Operations and Maintenance - Toxics	1.3	$195.9	1.3	$141.1	1.3	$360.7	1.3	$311.7	1.3	$232.6
System Operations and Maintenance - Multimedia	7.9	$892.7	7.9	$864.6	4.0	$492.6	3.8	$820.7	6.8	$829.1
Measuring and Reporting Accomplishments			9.2	$598.0						
ECOS/NAPA								$500.0		
Data Quality									1.4	$374.9

ENFORCEMENT TARGETING: DATA/INFORMATION SYSTEMS PROGRAM FUNDING LEVELS
(dollar amounts are in thousands)

	FY 1999 President's Request (BAS Version 2.1)		FY 1999 Enacted Operating Plan (BAS Version 11.1)		FY 2000 President's Request (BAS Version 1.0)		FY 2000 Enacted Operating Plan (BAS Versions 1.0 + 4.0)		FY 2001 President's Request (BAS Version 1.0)	
	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS
-- **Regions**	69.5	$5,153.5	69.5	$5,153.5	69.5	$5,291.2	67.8	$5,333.2	65.7	$5,593.3
System Operations and Maintenance - Multimedia	69.5	$5,153.5	69.5	$5,153.5	69.5	$5,291.2	67.8	$5,333.2	65.7	$5,593.3
-- **Immediate Office**										$323.5
Working Capital Fund										$323.5
SUPERFUND:	2.5	$938.0	2.9	$1,381.9	2.9	$913.1	2.7	$1,111.4	2.7	$1,063.7
Headquarters:	2.5	$938.0	2.9	$1,381.9	2.9	$913.1	2.7	$1,111.4	2.7	$1,063.7
GOAL 7 OBJECTIVE 1 SUBOBJECTIVE 2	0.5	$115.5	0.9	$152.9	0.9	$469.0	0.8	$429.1	0.8	$283.9
-- **Office of Compliance**						$328.0		$300.0		$178.1
System Development - Multimedia								$150.0		$178.1
System Operations and Maintenance - Multimedia								$150.0		
Public Access						$328.0				
-- **Enforcement Capacity and Outreach Office**	0.5	$115.5	0.9	$152.9	0.9	$141.0	0.8	$129.1	0.8	$105.8
Public Access	0.5	$115.5	0.9	$152.9	0.9	$141.0	0.8	$129.1	0.8	$105.8
GOAL 9 OBJECTIVE 1 SUBOBJECTIVE 2	2.0	$822.5	2.0	$1,229.0	2.0	$444.1	1.9	$682.3	1.9	$779.8
-- **Office of Compliance**	2.0	$822.5	2.0	$1,229.0	2.0	$444.1	1.9	$682.3	1.9	$779.8
System Operations and Maintenance - CERCLA	2.0	$822.5	2.0	$1,229.0	2.0	$444.1				
Compliance and Enforcement Targeting							0.9	$207.2	0.9	$272.9
System Operations and Maintenance - Multimedia							1.0	$475.1	1.0	$506.9

*The Agency's database does not track obligations at the budget activity, program component, or key program level. FY 1999 actuals displayed in this column reflect rough estimates only.

ENFORCEMENT TARGETING: COMPLIANCE MONITORING PROGRAM FUNDING LEVEL

Question. Provide funding levels, in terms of dollars and FTE, for all activities under the Compliance Monitoring program component of the Office of Enforcement and Compliance Assurance (OECA) in the fiscal year 1999 budget request, fiscal year 1999 operating plan, fiscal year 1999 actuals, fiscal year 2000 budget request, fiscal year 2000 proposed operating plan, and fiscal year 2001 budget request. Provide the information by appropriation, goal, objective, sub-objective, office or region, and activity. Ensure that targeting activities are labeled and differentiated from compliance monitoring activities.

Answer. The attached spreadsheet provides resource information for OECA's compliance monitoring key program. The information comes from the Agency's Budget Automation System (BAS). The resources requested for the fiscal year 1999 actuals and activity level information are not maintained in the Agency's key program database.

ENFORCEMENT TARGETING: COMPLIANCE MONITORING PROGRAM FUNDING LEVEL
(dollar amounts are in thousands)

	FY 1999 President's Request (BAS Version 2.1)		FY 1999 Enacted Operating Plan (BAS Version 11.1)		FY 2000 President's Request (BAS Version 1.0)		FY 2000 Enacted Operating Plan (BAS Versions 1.0 + 4.0)		FY 2001 President's Request (BAS Version 1.0)	
	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS	FTE	TOTAL DOLLARS
TOTAL:	**545.4**	**$57,776.6**	**535.5**	**$51,175.1**	**568.2**	**$57,160.2**	**525.8**	**$50,762.7**	**525.7**	**$60,521.4**
Headquarters:	120.1	$19,126.3	110.2	$14,675.3	118.9	$17,234.2	105.5	$14,316.9	105.4	$16,123.1
Regions:	425.3	$38,650.3	425.3	$36,499.8	449.3	$39,926.0	420.3	$36,445.8	420.3	$44,398.3
EPM:	**520.6**	**$54,995.3**	**510.7**	**$48,472.1**	**543.4**	**$54,347.0**	**507.2**	**$48,500.0**	**507.2**	**$58,014.2**
Headquarters:	95.3	$16,345.0	85.4	$11,972.3	94.1	$14,421.0	86.9	$12,054.2	86.9	$13,615.9
Regions:	425.3	$38,650.3	425.3	$36,499.8	449.3	$39,926.0	420.3	$36,445.8	420.3	$44,398.3
GOAL 9 OBJECTIVE 1	**520.6**	**$54,995.3**	**510.7**	**$48,472.1**	**543.4**	**$54,347.0**	**507.2**	**$48,500.0**	**507.2**	**$58,014.2**
-- Office of Compliance	81.9	$11,954.4	72.0	$8,544.8	81.7	$10,122.0	80.0	$9,109.8	80.0	$10,995.9
-- Office of Regulatory Enforcement	10.5	$3,864.1	10.5	$2,919.9	10.5	$3,875.7	5.0	$2,514.8	5.0	$1,555.3
-- Federal Facilities Enforcement Office	2.9	$526.5	2.9	$507.6	1.9	$423.3	1.9	$429.6	1.9	$492.2
-- Immediate Office*										$572.5
-- Regions	425.3	$38,650.3	425.3	$36,499.8	449.3	$39,926.0	420.3	$36,445.8	420.3	$44,398.3
S&T:	**24.8**	**$2,781.3**	**24.8**	**$2,703.0**	**24.8**	**$2,813.2**	**18.6**	**$2,262.7**	**18.5**	**$2,507.2**
Headquarters:	24.8	$2,781.3	24.8	$2,703.0	24.8	$2,813.2	18.6	$2,262.7	18.5	$2,507.2
GOAL 9 OBJECTIVE 1	**24.8**	**$2,781.3**	**24.8**	**$2,703.0**	**24.8**	**$2,813.2**	**18.6**	**$2,262.7**	**18.5**	**$2,507.2**
-- Ofc of Criminal Enforce, Forensics, & Training	24.8	$2,781.3	24.8	$2,703.0	24.8	$2,813.2	18.6	$2,262.7	18.5	$2,507.2

* In FY 2001, resources in the Immediate Office support this key program. Working capital fund dolalrs will be allocated across all key programas to reflect the total resources that support these programs.

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

ACCESS TO DATA: FEDERALLY FUNDED RESEARCH DATA

Question. It is my understanding that EPA has proposed to adopt OMB's interpretation of my amendment by applying it only to awards made to institutions after November 1999. Does this mean the American public will not see the underlying federally funded research data that has been or will be cited in your agency's TIER II rule, Environmental Justice Guidance, 2002 PM/Ozone review, and low sulphur diesel regulation—among others?

Answer. You are correct in your understanding that EPA has proposed to adopt OMB's interpretation that your amendment applies only to awards made to institutions after November 1999. As to the question of whether EPA will provide research data both produced as a part of federal assistance agreements initiated prior to November 1999 and not in the Agency's possession, this determination will continue to be made on a case-by-case basis. Of course, research data that are in the Agency's possession will continue to be provided upon FOIA request (subject to applicable FOIA exemptions). This policy applies to all research data related to Agency rulemakings and other preceedings, including those cited in your question.

ACCESS TO DATA: PUBLIC INTEREST IN CREDIBILITY AND VALIDITY

Question. Do you believe that the public has an interest in the credibility and validity of the underlying data that would support these agency actions?

Answer. It is crucial that the public know that the science that serves as the foundation for governmental actions is sound—from ensuring the safety of medications to protecting the environment. One way to make sure this happens is sustaining the integrity of scientific peer review, a process that has served the scientific community in the United States well over the years. EPA recognizes the need for thorough peer review of the science behind its policy decisions and has taken several steps to bolster the degree to which peer review is integrated into all major policy actions. For example, when the Agency reevaluates the adequacy of National Ambient Air Quality Standards, we only consider information in the peer-reviewed scientific literature. EPA summarizes these studies in a criteria document, which is then peer reviewed by the Clean Air Scientific Advisory Committee. The broadening of our reliance on peer review is best exemplified by the issuance of our Peer Review Handbook in 1998.

ACCESS TO DATA: LEVEL OF PUBLIC ACCESS

Question. Shouldn't they be able to see the data you claim supports your rules if they so choose? Or should they just take your word for it?

Answer. EPA is strongly committed to the public availability of data used to support regulations and policies. We encourage researchers to make their data available for other researchers and the public whenever possible.

Nonetheless, we recognize that there are circumstances that must be considered when determining whether it is appropriate to publicly release such information. For example, the Agency routinely considers confidential business information in its public access decisions whose release may place corporations at a competitive disadvantage were they to be made public. Additionally, the Agency sometimes bases decisions on health studies that rely on an individuals medical records, whose participation in the study was predicated on the agreement that these records not be made public.

In two recent situations involving health effects studies on particulate matter, researchers refused to release the underlying health data after requested to do so by EPA, citing confidentiality agreements not to release personal medical records. To address public concerns about the integrity of these studies, EPA enlisted the help of the original researchers and independent research organization, the Health Effects Institute (HEI). HEI recruited independent researchers to audit the data in the original reports and to undertake their own re-analyses of these data. These audits and re-analyses were recently completed and corroborated the results of the original peer-reviewed studies.

ACCESS TO DATA: PEER REVIEW AND PUBLIC ACCESS

Question. Do you believe peer review is a substitute for public access?

Answer. EPA evaluates peer review and public access issues separately; one is not considered to be a substitute for the other. EPA policy is to require peer review for all major scientific and technical work products, and in special cases for non-major products. Independent, expert review is key to the scientific credibility of EPA's de-

cisions. The Agency has taken major steps in recent years to enhance its peer review efforts, including its 1998 publication of the EPA Peer Review Handbook and the 1999 implementation of a new peer review database to track at the project level program and regional office implementation of the Agency's peer review guidance.

EPA also supports public access to data, as long as privileged information such as medical records and confidential business information (for example, proprietary data on patented chemical formulations) remains protected. Over the past several years, the Agency has taken many steps to increase public access to data; new information technology has helped us considerably in this area.

In sum, peer review and public access to data are both important, and neither is a substitute for the other. EPA has made great strides in recent years to enhance both of these key aspects of scientific credibility, and will continue to do so in the future.

ACCESS TO DATA: PUBLIC ACCESS AND FEDERAL DECISIONMAKING

Question. Do you not agree that public disclosure generally promotes greater scrutiny, accountability and transparency in the federal decisionmaking process?

Answer. We agree that public disclosure of information that serves as the foundation for Federal decisionmaking promotes scrutiny, accountability and transparency in the process. EPA remains committed to such disclosure, consistent with applicable statutes and other requirements.

ACCESS TO DATA: FEDERALLY FUNDED RESEARCH AGENCY ACCESS TO DATA

Question. Aside from last year's law and OMB's new rule expanding the public's access to federally funded research data—it is my understanding that EPA and every federal agency has the rights to obtain federally funded research data. It is in all of your contracts. Has EPA ever waived its rights to the research study data it funds?

Answer. EPA's Office of Research and Development (ORD) has never waived its rights to the research study data it has funded. EPA–ORD has the right to obtain research study data that it has funded.

Question. If you have, why and in what circumstances have you done that?

Answer. Not applicable

Question. If you have not, when has EPA ever exercised its right to obtain the underlying data, if ever? Please outline those cases, if any, in writing to the Subcommittee.

Answer. Please see attached Shelby Attachment 1 for instances when EPA–ORD has exercised its right to obtain underlying data from Federally funded research since 1995.

Instances When EPA-ORD Has Exercised Its Right to Obtain Underlying Data from Federally Funded Research Since 1995

Type of Instrument	Instrument #	Contractor or Recipient	Description of the Work/Data
Cooperative agreement	CR824167	Lovelace Clinic Foundation	Analysis of sera for antibodies to drinking water microbes
Cooperative agreement	CR822898	University of Cincinnati, Investigator: Leonard Bernstein.	Provided disk with raw data so we could run statistical analysis prior to publication.
Cooperative agreement	CR820510	University of Michigan (and now Case Western Reserve University, Investigator: Kevin Cooper.	Provided disk with raw data for statistical analysis.
Cooperative agreement	CR822003-01	Johns Hopkins University	Data related to human exposure to hexavalent chromium. Original data was collected by Allied Chemical in Balto. MD, and used by Johns Hopkins University in a cooperative agreement study. The data was provided to the project officer at EPA. Two pre-publication manuscripts were provided to Public Citizen in response to a FOIA. Earlier in the study, a subset of the preliminary data was provided to OSHA and marked as such. This same subject was also provided to Inside Washington in response to a FOIA.
Cooperative agreement	CR818090 and CR8116500	Harvard University and Brigham and Women's Hospital	EPA asked for data in 1/97 letter to researchers from Mary Nichols (AA/OAR), but request was denied. Data were not collected under co-ops (only analysis supported), but rather, under NIEHS Grants and privately by American Cancer Society. The Harvard investigators ultimately agreed to provide the original data, collected using federal funds provided by NIEHS et al, to a third party for reanalysis, with extensive controls put in place to assure private and confidential health data were not divulged.

Shelby Attachment 1

Instances When EPA-ORD Has Exercised Its Right to Obtain Underlying Data from Federally Funded Research Since 1995.

Type of Instrument	Instrument #	Contractor or Recipient	Description of the Work/Data
Contract	68D99002	EMORY University	Analysis of NHEXAS Harvard Coooperative Study Data
Contract	68D99003	University of Arizona	Analysis and Reporting of the NHEXAS Arizona Exposure Data and Delivery of Validated NHEXAS Arizona Study Database
Contract	68D99008	Research Triangle Institute	Analysis of NHEXAS Region V Study Data
Contract	68D50049	Man Tech Environmental Technology	Atmospheric and exposure research related to an agricultural health study of exposure of farm workers and families to pesticides.

FEDERALLY FUNDED RESEARCH: AGENCY ACCESS AND PUBLIC ACCESS

Question. Why doesn't EPA use its existing powers to obtain that data to release the information as a matter of good government?

Answer. As noted in the answer to the previous question, EPA has exercised its right to obtain data for public release. Such information exchanges also occur routinely on the part of Federally-funded researchers on an informal basis, as a part of the scientific process.

To the maximum extent possible, EPA uses scientific and technical data for regulatory decision making that have appeared in peer-reviewed publication. Therefore, the data are already publicly available. For studies or data that do not fall into this category and were funded prior to the recent amendments to OMB Circular A–110, a decision to exercise our right to obtain data must be weighed against legal or other factors, e.g., the need for confidentiality of human subjects. There have been very few occasions where such issues have arisen. Thus, the Agency will continue its practice of evaluating such requests on a case-by-case basis.

ACCESS TO DATA: CRITICAL STUDIES DATA

Question. Why won't EPA make a commitment to do everything it can to obtain the data for the critical studies cited in rules in a timely manner, so the public can review the data?

Answer. EPA has been and remains strongly committed to the public availability of data used to support regulations and policies. We encourage researchers to make their data available for other researchers and the public whenever possible.

For regulatory decision making, it is our policy to rely to the maximum extent possible on studies and data that have already been published. We believe this is the best way to assure transparency of the decision process. However, we recognize that there are sometimes countervailing considerations that must be weighed when determining whether it is appropriate to publicly release information. For example, the Agency routinely considers confidential business information in its decisions, the release of which may place submitters of such information at a competitive disadvantage were it to be made public. Additionally, we sometimes base decisions upon health studies that rely on the medical records of individuals, whose participation in the study was predicated on the agreement that those records not be made public.

NAAQS RESEARCH FUNDING

Question. Ms. Browner, over the last few years, I have repeatedly requested the federally funded research data used to justify EPA's 1997 PM/Ozone rule—specifically, the American Cancer Society and Harvard (of Pope) studies. For various reasons, I have been told that your agency can not obtain these studies. Now, it is my understanding that EPA did not fund these studies. As Administrator of the EPA who promulgated this rule, I'd appreciated it if you find out if any federal agency funded these studies that you relied on.

Answer. With regard to obtaining the two studies mentioned above [Dockery et al., 1993, An association between air pollution and mortality in six U.S. cities. *N Engl J Med* 329:1753–1759; Pope et al., 1995, Particulate air pollution as a predictor of mortality in a prospective study of U.S. adults. *Am J Respir Crit Care Med* 151:669–674], EPA has always been able to obtain the studies themselves and has placed copies of the published studies in the docket for the PM NAAQS review. However, although EPA requested the raw health data, EPA has not been able to obtain the data used in these studies (see response to question #3).

With regard to federal funding for these studies, EPA has provided funding, in part, for both studies. In the published reports for the two studies, the authors acknowledge funding from numerous sources. The Dockery et al. (1993) study was supported by several grants from the National Institute of Environmental Health Sciences (NIEHS) and EPA as well as a contract with the Electric Power Research Institute. The Pope et al. (1995) study, which used health data collected by the American Cancer Society, was also supported by grants from NIEHS and EPA. For both studies, EPA grant funds were provided to specifically support the analysis of the data, not the collection of the health data.

GUIDANCE AND POLICY DOCUMENTS

Question. I am very concerned about the growing use of agency guidelines and policy documents that in many cases impose significant and substantive requirements on business and individuals. These documents are not given the public con-

sideration and due process protections of a rulemaking procedure. What legal effect do EPA interpretive rules, policies, and guidance documents have?

Answer. Interpretive rules are generally non-binding advisory statements that interpret the language of a statute or a legislative rule. They may state what we think a particular statute means and remind parties of existing duties. A policy statement (which includes guidance documents, guidelines, manuals, and opinion letters) announces EPA's intended future course or areas for exploration with respect to how EPA will interpret or enforce a statutory or regulatory provision, and leaves EPA free to exercise administrative discretion in carrying out the policy.

Generally, interpretive rules and policy statements are similar in that neither have the force of law that is, they do not impose binding legal requirements. Interpretive rules are distinguishable from general statements of policy and guidance documents because while interpretive rules clarify or explain existing statutes or regulations, general statements of policy announce to the public the policy which the agency intends to apply in the future when making decisions, whether through rulemakings, adjudications, or other agency actions. See *National Whistleblower Ctr.* V. *Nuclear Regulatory Comm'n,* F.3d (D.C. Cir. Apr. 11, 2000) ("the advance-notice function of policy statements yields significant informational benefits, because policy statements give the public a chance to contemplate an agency's views before those views are applied to particular factual circumstances"). See also EPA's response to the question below on legal analysis of binding effect of these types of documents.

Question. If they are not legally binding, should the taxpayers you regulate be told clearly these documents which interpret rules and policies have no binding legal effect and that people, in reality, are free to disregard them?

Answer. EPA believes such a provision is unnecessary. As you are aware, EPA issues many kinds of general guidance documents and other statements to help the public and regulated community understand and comply with the Agency's regulatory programs and requirements. EPA has found that the more tools we use to communicate with regulated entities, our regulatory partners (state, local and tribal governments), and the public at large, the more effective we can be in explaining our programs and anticipating and answering their questions. We believe the regulated community, our regulatory partners, and the public find EPA's extensive communication efforts—including guidance documents, policy statements, fact sheets, question and answer documents, reports, advisories, letters responding to individual questions, and other means of providing information about our activities—to be very helpful to, and an important part of our programs.

We appreciate the need of the regulated community to be able to differentiate between a legally binding document and one that is not. To promote clarity, the Agency currently includes language in many of our non-binding policy statements and guidance documents notifying the readers that such documents are not legally binding. Requiring the inclusion of a statement in all non-binding Agency documents, such as fact sheets, analytical reports, and guidance documents may cause unnecessary confusion, particularly when the aim of some of the materials is to inform and explain to regulated entities underlying regulatory requirements that are legally binding.

For example, section 212 of the Small Business Regulatory Enforcement Fairness Act requires agencies to publish one or more small entity compliance guides for any rule for which a final regulatory flexibility analysis was prepared under 5 U.S.C. § 604. The purpose of these guides is to assist small entities in complying with the rule, by "explain[ing] the actions a small entity is required to take to comply with a rule or group or rules." Pub. L. 104–121, sec. 211 (emphasis added). These are non-binding guidance documents that explain binding regulatory requirements to small entities in "sufficiently plain language likely to be understood by affected small entities." *Id*. Including a statement that the guide is non-binding and regulated small entities are free to disregard it may lead to unnecessary confusion.

Question. Are interpretive rules, guidance or policy documents subject to the administrative requirements of Section 553 of the Administrative Procedure Act?

Answer. No. Section 553(b) of the Administrative Procedure Act states:

> "General notice of proposed rule making shall be published in the Federal Register, unless persons subject thereto are named and either personally served or otherwise have actual notice thereof in accordance with law."

However, section 553(b)(A) expressly exempts from the requirements of advance publication and opportunity for public participation interpretive rules, general statements of policy, or rules of agency organization, procedure or practice. That section provides:

"Except when notice or hearing is required by statute, this subsection does not apply—

"(A) to interpretive rules, general statements of policy, or rules of agency organization, procedure, or practice . . . ." 5 U.S.C. § 553(b)(A) (emphasis added).

A general statement of policy is merely an announcement to the public of the policy which EPA plans to implement in future rulemakings or adjudications. As a consequence, the APA does not require notice and comment rulemaking to issue a policy statement.

Question. What about judicial review? Are guidance documents subject to judicial review?

Answer. Policy statements, guidance documents, and interpretive rules generally are not subject to judicial review. However, someone may bring suit to challenge any of these documents if he or she believes it actually is a substantive rule that was not promulgated in accordance with the Administrative Procedure Act's requirement of notice and opportunity for comment.

Question. I would appreciate you providing the Subcommittee with a legal analysis including citations of authorities that support the view that interpretive rules, guidance or policy documents have binding legal effect if you believe them to have some legal weight.

Answer. EPA is not aware of legal cases that support the view that interpretive rules, guidance or policy documents generally have binding legal effect. In fact, courts have consistently held that the fact that such documents do not create substantive law is one reason Congress exempted them from notice-and-comment rulemaking when it enacted the Administrative Procedure Act.

For example, in *American Hospital Association* v. *Bowen,* 834 F.2d 1037, 1045–46 (D.C. Cir. 1987), the court noted:

"The reading of the § 553 exemptions that seems most consonant with Congress' purposes in adopting the APA is to construe them as an attempt to preserve agency flexibility in dealing with limited situations where substantive rights are not at stake. The exceptions have a common theme in that they accommodate situations where the policies promoted by public participation in rulemaking are outweighed by the countervailing considerations of effectiveness, efficiency, expedition and reduction in expense. Agency actions or statements falling within the three exemptions are not determinative of issues or rights addressed. They express the agency's intended course of action, its tentative view of the meaning of a particular statutory term, or internal house-keeping measures organizing agency activities. They do not, however, foreclose alternate courses of action or conclusively affect rights of private parties . . . . Unlike legislative rules, non-binding policy statements carry no more weight on judicial review than their inherent persuasiveness commands.

"Substantive rules are ones which grant rights, impose obligations, or produce other significant effects on private interests, or which effect a change in existing law or policy. Interpretive rules, by contrast, are those which merely clarify or explain existing law or regulations, are essentially hortatory and instructional, and do not have the full force and effect of a substantive rule but [are] in the form of an explanation of particular terms.

"The function of the second § 553 exemption, for general policy statements, is to allow agencies to announce their tentative intentions for the future, without binding themselves. We have previously contrasted a properly adopted substantive rule with a general statement of policy, observing that while a substantive rule establishes a standard of conduct which has the force of law in subsequent proceedings, a general statement of policy, on the other hand, does not establish a binding norm. It is not finally determinative of the issues or rights to which it is addressed. The agency cannot apply or rely upon a general statement of policy as law because a general statement of policy only announces what the agency seeks to establish as policy. [Emphasis added.]"

There are cases in which a court has found an agency's purported interpretive rule, guidance document, or policy statement to be a substantive rule, either because the rule established binding norms on its face, or the agency applied the document with the inflexibility of a rule. These cases, however, are instances where the agency did not properly issue a substantive rule; they do not stand for the proposition that generally, interpretive rules, guidance documents and policy statements have binding legal effect.

BEVILL WASTES DETERMINATION: NEW INFORMATION TO JUSTIFY REGULATORY DECISION

Question. What significant new information have you received that would justify overriding the technical positions of EPA's professional staff at the end of a 19 year process as well as your own recommendations last March in the Report to Congress? Please provide any such new evidence to the Committee.

Answer. On April 25, 2000, the EPA announced our decision to continue to exempt fossil fuel combustion wastes from regulation as hazardous waste. This decision was based on all available information, including new information submitted as public comments to us in response to our March 1999 Report to Congress.

At the same time, we announced that we will establish non-hazardous waste national regulations applicable to fossil fuel combustion wastes when managed in surface impoundments and landfills and when the wastes are used as minefill. This decision was based in part on significant new environmental information that was submitted to the Agency in response to our March 1999 Report to Congress. In preparing the Report to Congress, EPA concentrated its efforts on damage case analyses in 5 of the major coal consuming states, but our survey was not exhaustive in those states. Based on a review of facility data for these 5 states involving coal combustion wastes managed in surface impoundments or landfills, EPA identified 7 proven damage cases and 11 potential damage cases (a potential damage case is one in which there is a known release from a waste management unit, but the release has not traveled sufficiently far from the unit to pose an actual threat to human health or the environment, but has the "potential" to do so in the future). Commenters provided documentation for 59 candidate damage cases in another 13 states. After carefully reviewing this information, we concluded that 4 of these represented proven damage cases and an additional 25 represented potential damage cases. Thus, EPA believes that it is highly likely that other cases of proven or potential damage would be identified if we reviewed data in the remaining 32 states.

This new information contributed to our April 25 decision to continue to exempt the wastes from regulation as hazardous wastes but to establish national non-hazardous waste regulations for these wastes, under Subtitle D of RCRA.

BEVILL WASTES DETERMINATION: REASON FOR CHANGE OF POSITION

Question. If there is no new evidence to contradict previous findings, then why the change of position on the determination on these wastes?

Answer. As explained in the previous question,on April 25, 2000, EPA decided that it was appropriate to continue to exempt fossil fuel combustion wastes from being regulated as hazardous. Senator Shelby

BEVILL WASTES DETERMINATION: EFFECT ON RECYCLING EFFORTS

Question. Many states, including mine, have developed successful programs to increase the beneficial use of these materials, e.g., use in the production of concrete. This beneficial use is environmentally sound, conserves virgin natural resources and conserves energy. There is a growing market for coal combustion by-products and unless this waste is recycled it will have to be landfilled.

Has the EPA considered the chilling effect and significant decrease in these recycling efforts that will occur if you reverse EPA's own studies and your Report to Congress and regulate these materials as hazardous?

Answer. EPA did not identify any significant risk posed by beneficial uses of fossil fuel combustion wastes in construction applications, such as in concrete or concrete products, in production of wall board, and as road bed material. We have, however, identified the potential for significant risk resulting from certain applications of coal combustion wastes when used to fill underground or surface mines (an activity that increasingly uses these wastes). While this practice can provide significant benefits, when not properly done minefilling has the potential to contaminate ground water to levels that could damage human health and the environment.

EPA wants to ensure that any actions taken by the Agency not place any unnecessary barriers on the beneficial use of coal combustion wastes. Our analyses indicate that beneficial uses of coal combustion wastes, with the exception of minefilling when not done properly, are not likely to pose significant risks to human health and the environment. For this reason and because most beneficial uses of coal combustion wastes conserve natural resources and reduce disposal costs, EPA decided that we would continue the exemption of fossil fuel combustion wastes from being regulated as hazardous wastes. Because of a concern that certain minefilling practices may pose significant risk to human health and the environment, we also decided that we would develop national regulations under non-hazardous waste authorities

(Subtitle D of RCRA) applicable to coal combustion wastes when used as minefill. We would base these standards on the approaches taken by states that currently have comprehensive programs addressing minefilling of coal combustion wastes.

QUESTIONS SUBMITTED BY SENATOR LARRY CRAIG

KYOTO PROTOCOL

Question. In EPA's fiscal year 2000 Annual Performance Plan it stated: "EPA will build a program that provides appropriate credit for early action."[Page VI–30]

Has EPA developed any analysis regarding the "credit for early action" legislation introduced in the Senate in the 105th Congress and the 106th Congress? If so, please provide this documentation, including a list of any recipients of this documentation.

Under what authority will EPA develop a "credit for early action" program?

Has EPA sponsored, co-sponsored or participated in any public meetings related to the global climate issue? If so, please provide the dates of the meetings, a list of participants, copies of as delivered presentations, and any presentation material used by EPA staff or produced as a result of a grant from EPA.

Answer. The above questions are identical to questions asked by the House Committee on Science and the Senate Appropriations Committee last year. We have attached the responses that EPA submitted for those questions. Please let us know if you would like any additional information.

FUNDING FOR STUDIES OF DOMESTIC OR INTERNATIONAL CARBON EMISSIONS TRADING

Question. Has EPA provided any funding for studies of either domestic or international carbon emissions trading?

If so, please provide by April 1, 2000: (a) the names of the organizations or individuals receiving the grant; (b) the amount of the grant; (c) the documents describing the initial scope of the project; (d) the dates of initial contact and project initiation; and (e) copies of these reports or preliminary drafts.

Also, please provide the Agency's statutory basis for pursuing these studies.

Answer. Please see attached information on EPA funding (since October 21, 1998) for studies of the design of carbon emissions trading systems. These documents could not be provided by April 1, 2000, because the questions were not received by the Agency until after the deadline.

EPA is authorized to pursue these studies under the following statutory provisions:

—Clean Air Act, 42 U.S.C. 7401 et seq.—sections 103(a), (b), (g)

—National Environmental Policy Act, 42 U.S.C. 4321 et seq.—section 102(2)(F)

—Global Climate Protection Act of 1987, 15 U.S.C. 13101 et seq.—section 1103

CLIMATE CHANGE: USE OF MODELS

Question. In 1999, Tim Barnett, Scripps Institution of Oceanography, ran 11 models and concluded: "There is no model that consistently agrees well with the observations." Is EPA using any models to predict the effects of global climate change on a regional or local level? If so, what models are being used?

Answer. EPA's assessments do not make predictions of the effects of future global climate change on a regional or local level. EPA uses input from climate models to define scenarios of potential climate futures. That is, the scenarios are used to understand the sensitivity and vulnerability of human and ecological systems to potential future global climate change, but not to make actual predictions of future conditions. All of the regional assessments being sponsored by the EPA as part of the National Assessment effort use state-of-the-art climate scenarios generated by the Canadian and British climate modelers (e.g., the Canadian Centre for Climate Modeling and Analysis; the Hadley Centre for Climate Prediction and Research). In some cases, the outputs of these climate models are used as inputs to Regional Climate Models in order to develop scenarios for future climatic conditions at a regional level. Also, EPA—and the regional coordinators it is sponsoring in the research community—are using the Vegetation/Ecosystem Modeling and Analysis Project (VEMAP) model output to understand the potential changes in vegetation that may occur as the climate changes.

EPA has conducted one study that assigns probabilities to particular future effects of climate change: *The Probability of Sea Level Rise*, which was published in October 1995. This study, conducted by the Office of Policy, Planning, and Evaluation, developed probability-based projections that can be added to local tide-gauge trends to estimate future sea level rise at particular locations around the coast of the United

States. The Report can be found on the Internet at: http://www.epa.gov/oppeoee1/globalwarming/publicatons/impacts/sealevel/probability.html.

CLIMATE CHANGE: JUSTIFICATIONS OF MODELS

Question. Since, according to the Hansen paper as well as others, models are not capable of predicting natural variability and global effects, how can EPA justify using these models to predict effects on a smaller, "microscopic scale" as planned for the 3 regional assessments (Mid-Atlantic, Great Lakes, & Gulf Coast)?

Answer. EPA's assessments of the potential consequences of climate change and variability on the United States rely on a diversity of information. Some of the EPA assessment work uses input from climate models to define scenarios of potential climate futures. For example, all of the regional assessments being sponsored by the EPA as part of the National Assessment effort use state-of-the-art climate scenarios. All of the regional and sectoral teams for the National Assessment worked with two climate models, the United Kingdom's Hadley Center Model and the Canadian Coupled Climate Model. These two models were chosen for several reasons. First, it was important that all the assessments be based on the same models to ensure comparability. Second, when the National Assessment began, the Canadian and Hadley Models were the only two global climate models that incorporated the role of aerosols as off-sets to the warming effects of greenhouse gases. These two vary in their interpretation of other factors, and therefore differ in their scenarios of future climate.

It must be emphasized that the climate model output is viewed as scenarios, not predictions of future climate. EPA's regional assessments do not use models to "predict" any particular climate future, but rather to develop a range of possible scenarios of future climate. The scenarios serve as the basis for assessing the possible consequences of climate change—positive and negative consequences. It is the possible consequences that will be of use to decision makers, and of interest to stakeholders. They are being used to understand the sensitivity and vulnerability of human and ecological systems to potential future climate change, but not to make actual predictions of future conditions.

It is also important to understand that the regional assessments are not limited to scenarios generated by climate models. The assessments also use other information to illustrate the potential consequences of climate variability and change for human health and ecological systems. In addition to climate model output, EPA's assessment work also relies on historic data to understand the sensitivity of human and ecological systems to change (e.g., changes in the profile of the Blackwater National Wildlife Refuge as sea level has risen during the past 50 years). Also, plausible "what if" scenarios are used to illuminate the sensitivity of various systems. These sensitivity analyses help to define the potential risks and opportunities posed by climate change and variability to human health, ecosystems, and social well-being.

CLIMATE CHANGE: HEALTH SECTOR ASSESSMENT

Question. Because of these substantial modeling problems, what is the basis for EPA conducting a "Health Sector Assessment" in fiscal year 2000?

Answer. The Health Assessment Work Group used a set of assumptions and/or projections of future climates developed for all participants in the National Assessment of "The Potential Consequences of Climate Variability and Change." The output from the climate models was used to define scenarios of potential climate futures. It must be emphasized that the climate model output was viewed as scenarios, not predictions of future climate. The scenarios were used to understand the sensitivity and vulnerability of human health to potential future climate change, but not to make actual predictions of future conditions.

The Health Sector Assessment focused on understanding the relationships between several categories of health outcomes and weather and/or climate variables (e.g., temperature-related morbidity and mortality; health effects of extreme weather events; air-pollution-related health effects). The assessment examined both benefits and detriments arising from possible changes in future climate. Their analysis was, for the most part, not quantitative because of many layers of uncertainties in the data. In fact, the Health Assessment Work Group concluded that the levels of uncertainty preclude any definitive statement on the direction of change for each of these health outcomes, although they developed some hypotheses.

Projections of the extent and direction of the potential health impacts of climate variability and change are extremely difficult to make because of the many confounding and poorly understood factors associated with potential health outcomes, population vulnerability, and adaptation. For example, the relationship between

weather and specific health outcomes is understood for a relatively small number of diseases, with few quantitative models available for analysis. Research aimed at filling the priority knowledge gaps identified in this assessment would allow for more quantitative assessments in the future.

The Health Sector Assessment went through an extensive peer review process that has been fully documented. Based on the peer review, the Assessment meets the highest standards of scientific excellence and is scientifically credible, balanced, and unbiased.

Question. Is the EPA using "worst case scenarios?"

Answer. No, EPA is not using "worst case scenarios."As noted above, to the extent that scenarios of future climate were used, the Health Assessment Work Group used a set of assumption and/or projections of future climates developed for all participants in the National Assessment of "The Potential Consequences of Climate Variability and Change." These projections were based on the outputs of the Canadian Coupled-Climate Model and the United Kingdom's Hadley Centre Climate Model. These two models were chosen for several reasons. First, it was important that all the assessments be based on the same models to ensure comparability. Second, when the National Assessment began, the Canadian and Hadley Models were the only two global climate models that incorporated the role of aerosols as off-sets to the warming effects of greenhouse gases. These two vary in their interpretation of other factors, and therefore differ in their scenarios of future climate. Their outputs fall in the middle of a range of outputs by a number of climate models.

CLIMATE CHANGE: U.S. NATIONAL ASSESSMENT PARTICIPATION

Question. Who from EPA is participating in the U.S. National Assessment "The Potential Consequences of Climate Variability and Change" and what are the specific topical and work group assignments?

Answer. As part of the U.S. National Assessment effort, EPA is sponsoring the Mid-Atlantic Regional Assessment, the Great Lakes Regional Assessment, the Gulf Coast Regional Assessment, and the Health Sector Assessment. An "arms-length" relationship has been maintained between EPA and the Work Groups producing the three Regional Assessments and the Health Sector Assessment. EPA researchers are contributing to the assessments, but the assessments are being managed by independent universities throughout the country. These assessments are being conducted through a public-private partnership that actively engages researchers from the academic community, decision makers, resource managers, and other affected stakeholders in the assessment process.

Several EPA researchers have contributed to the EPA-sponsored assessments. EPA researchers involved in the Mid-Atlantic Regional Assessment include Dr. Catriona Rogers (Office of Research and Development), Dr. John McCarty (AAAS Fellow, Office of Research and Development), and Dr. Henry Walker (Office of Research and Development).

The Mid-Atlantic Regional Assessment is also a stakeholder-oriented process that is actively engaging an Advisory Committee of over 90 members from the private and public sectors. EPA researchers and personnel who serve on the large Advisory Committee include Mr. Thomas DeMoss (EPA Mid-Atlantic Integrated Assessment Team), Dr. Ray Lassiter (Office of Research and Development), Mr. Ed Linky (EPA Region 2), Dr. Joel Scheraga (Office of Research and Development), Dr. Betsy Smith (Office of Research and Development), Mr. Eric Walbeck (EPA Mid-Atlantic Integrated Assessment Team), and Dr. Janet Gamble (Project Officer, Office of Research and Development).

Ms. Anne Grambsch is one of the 12 Lead Authors for the Health Sector Assessment. The other Lead Authors come from Johns Hopkins University, Harvard Medical School, the University of Florida, EPRI, NOAA, CDC-Division of Vector-borne Diseases, and CDC-Division of Environmental Hazards and Health Effects.

Mr. Jim Titus is an author of the Coastal and Marine Resources Sector Team under the U.S. National Assessment.

CLIMATE CHANCE: U.S. NATIONAL ASSESSMENT SUPPORT FOR PARTICIPATION

Question. Who is being provided EPA support for participation in the U.S. National Assessment and what are the specific topical and Work Group assignments?

Answer. As part of the U.S. National Assessment effort, EPA is sponsoring the Mid-Atlantic Regional Assessment, the Great Lakes Regional Assessment, the Gulf Coast Regional Assessment, and the Health Sector Assessment. The Mid-Atlantic Regional Assessment is being conducted by The Pennsylvania State University. The Great Lakes Regional Assessment is being conducted by the University of Michigan.

The Gulf Coast Regional Assessment is being conducted the Southern University. The Health Sector Assessment is being conducted by Johns Hopkins University.

The Mid-Atlantic Regional Assessment is analyzing the potential effects of climate change and variability on forests, agriculture, water, coasts, and human health, as well as additional selected issues that cut across these five impacts areas (e.g., ecosystems). The Great Lakes Regional Assessment is considering water quality and quantity (including lake level and temperature changes), storms and extreme events, ecological and natural resources (such as plant life, forests, wetlands, aquatic life and agriculture), air quality, health and education. The Gulf Coast Regional Assessment is, to varying degrees, analyzing the potential effects of climate change and variability on ecosystems, farming and forestry, industry, human health, air quality, water quality, fisheries, and recreation/tourism.

The Health Sector Assessment is examining five categories of health outcomes that are most likely to be affected by climate change because they are associated with weather and/or climate variables: temperature-related morbidity and mortality; health effects of extreme weather events (storms, tornadoes, hurricanes, and precipitation extremes); air-pollution-related health effects; water- and food-borne diseases; and vector- and rodent-borne diseases.

An "arms-length" relationship has been maintained between EPA and the Work Groups producing the three Regional Assessments and the Health Sector Assessment.

Question. Were any of these individuals involved in the IPCC Second Assessment Report?

Answer. To the best of our knowledge, only three individuals involved in the Regional and Sectoral Assessments being sponsored by EPA as part of the U.S. National Assessment were involved as Lead or Contributing Authors in the 1995 IPCC Second Assessment Report. These individuals are Dr. Jonathan Patz (Johns Hopkins University), Dr. Paul Epstein (Harvard Medical School), and Dr. Joel Scheraga (EPA Office of Research and Development). Dr. Patz is the Co-Chair of the Health Sector Assessment. Dr. Epstein is one of the 12 Lead Authors of the Health Sector Assessment. Dr. Scheraga is on the Advisory Committee for the Mid-Atlantic Regional Assessment.

Question. If so, please identify the specific roles and responsibilities in the Second Assessment Report?

Answer. Dr. Patz and Dr. Epstein were Principal Lead Authors of Chapter 8 of the Working Group II Report of the 1995 IPCC Second Assessment. Chapter 8 was entitled, "Human Population Health." Dr. Scheraga was a Contributing Author to Chapter 26 (a Technical Appendix) of the Workgroup II Report of the 1995 IPCC Second Assessment. Chapter 26 was entitled, "Technical Guidelines for Assessing Climate Change Impacts and Adaptations."

REQUEST: Please provide this list including affiliations and locations

Dr. Jonathan Patz, Department of Environmental Health Sciences, Johns Hopkins University School of Hygiene and Public Health, Baltimore, MD.

Dr. Paul Epstein, Center for Health and the Global Environment, Harvard Medical School, Boston, MA.

Dr. Joel Scheraga, National Program Director, Global Change Research Program, Office of Research and Development, U.S. Environmental Protection Agency, Washington, DC.

CLIMATE CHANGE: U.S. NATIONAL ASSESSMENT PEER REVIEW

Question. What peer review process is used for the science contributions prior to submittal to the US National Assessment?

Answer. All of the EPA-sponsored Regional and Sectoral Assessments are being held to the highest standards of scientific excellence. All of the Regional and Sectoral Assessment Reports are being subjected to an extensive peer review process that has been fully documented to ensure that they are scientifically credible, balanced, and unbiased. EPA's Global Change Research Program committed to the Congress that it would insist upon and maintain scientific excellence, openness, and broad-based participation in all of the regional and sectoral assessment reports that it sponsors. EPA has fulfilled this commitment and aggressively implemented a rigorous peer review process.

The following guidelines have been established and followed for the external peer review of the EPA-sponsored regional and sectoral reports:

Technical Review.—A technical review must be conducted to evaluate the accuracy and validity of statements of fact and interpretations of data. Each section of the report should be reviewed by independent experts with technical expertise in the appropriate subject area. These expert reviewers should include persons who are ac-

tive in relevant disciplines or fields of endeavor but who have not participated in the assessment process.

Comprehensive Review.—Experts with broad scientific and technical expertise relevant to the particular region or sector should review the entire document in a comprehensive manner. These reviewers should not have participated in the assessment process.

Public/Stakeholder Comment.—The report should be circulated for comment to a range of interested parties, including the stakeholders engaged in the assessment and be available to the public upon request during the review period.

Documentation of Reviews and Responses.—A document should be prepared that compiles and summarizes all broad categories of comments, and explains the assessment team's responses.

We also note that the entire assessment process was open and predicated on the involvement of stakeholders. The assessments were launched with workshops to formulate questions and concerns to be addressed by the assessments themselves. A wide range of stakeholders—including for example, representatives from industry, state and local governments, and environmental groups—were invited to take part in the workshops. Those who chose to take part had the opportunity to shape the assessment, to participate in it, and to review the assessment report.

CLIMATE CHANGE: U.S. NATIONAL ASSESSMENT PUBLIC REVIEW

Question. How can the public review this material prior to submittal to the U.S. National Assessment?

Answer. In order to ensure that all of the EPA-sponsored Regional and Sectoral Assessment Reports are scientifically credible, balanced, and unbiased, EPA established guidelines for a rigorous external peer review process that must be followed by the assessment teams. One component of this external peer review process includes:

Public/Stakeholder Comment.—The report should be circulated for comment to a range of interested parties, including the stakeholders engaged in the assessment and be available to the public upon request during the review period.

Copies of the assessment reports are available to the public upon request from the assessment teams during the review period. Also, EPA is requiring that each assessment team prepare a document that compiles and summarizes all broad categories of comments, and explains the assessment team's responses. This document will be made available to the public.

We also note that the entire assessment process was open and predicated on the involvement of stakeholders. The assessments were launched with workshops to formulate questions and concerns to be addressed by the assessments themselves. A wide range of stakeholders—including for example, representatives from industry, state and local governments, environmental groups—were invited to take part in the workshops. Those who chose to take part had the opportunity to shape the assessment, to participate in it, and to review the assessment report.

Question. Does EPA maintain a public Internet site that can be used to post this material?

Answer. EPA's Global Change Research Program does not yet have a public Internet site that can be used to post this material. However, each of the universities responsible for conducting the EPA-sponsored Regional and Sectoral Assessments maintain websites. These websites can be used to post this material. For example, The Pennsylvania State University maintains an excellent website on which is posted their Overview document entitled, *Preparing for a Changing Climate: The Potential Consequences of Climate Variability and Change.* The website address is: http://www.essc.psu.edu/mara/index.html

This website also posts documentation of responses to reviewers' comments on a draft version of the Overview report.

Question. Does EPA plan to use this site for public disclosure?

Answer. EPA's Global Change Research Program is in the process of developing a new public website. This website is being developed to further fulfill the Global Program's commitment to the Congress that it will insist upon and maintain scientific excellence, openness, and broad-based participation throughout its program (including in all of the regional and sectoral assessments that it sponsors). An important purpose of this website will be to disseminate data and information. It will provide a portal through which scientists, policy analysts, and the public can access research data, documents, project descriptions and updates, workshop announcements and proceedings, presentations, and analytic tools. It will also provide information produced by the Global Change Research Program's intramural and extra-

mural researchers, including output from the U.S. National Assessment. EPA expects to be able to use this new website for public disclosure.

CLIMATE CHANGE: TRANSFER OF INFORMATION

Question. Has EPA or anyone funded by EPA transferred any of its work under the U.S. National Assessment to anyone involved in the IPCC Third Assessment Report? If so, provide the following: (a) What material was transferred? (b) Who transferred the material? (c) Who authorized the transfer? (d) To whom was the material transferred?

Answer. No. In fact, EPA's Global Change Research Program has insisted that all work that it has sponsored as part of the U.S. National Assessment go through a rigorous peer review process before it is released—including release to anyone involved in the IPCC Third Assessment Report.

The following guidelines have been established and followed for the external peer review of the EPA-sponsored regional and sectoral reports:

Technical Review.—A technical review must be conducted to evaluate the accuracy and validity of statements of fact and interpretations of data. Each section of the report should be reviewed by independent experts with technical expertise in the appropriate subject area. These expert reviewers should include persons who are active in relevant disciplines or fields of endeavor but who have not participated in the assessment process.

Comprehensive Review.—Experts with broad scientific and technical expertise relevant to the particular region or sector should review the entire document in a comprehensive manner. These reviewers should not have participated in the assessment process.

Public/Stakeholder Comment.—The report should be circulated for comment to a range of interested parties, including the stakeholders engaged in the assessment and be available to the public upon request during the review period.

Documentation of Reviews and Responses.—A document should be prepared that compiles and summarizes all broad categories of comments, and explains the assessment team's responses.

CLIMATE CHANGE: IPCC EPA PARTICIPATION

Question. Who from EPA is participating in the U.N. Intergovernmental Panel on Climate Change (IPCC) Third Assessment Report and what are the specific topical and Work Group assignments?

Answer. The following EPA personnel are participating in the IPCC Third Assessment Report:

Mr. Bill Rhodes is a Contributing Author on ancillary benefits for Chapter 8 of Working Group III of the IPCC Third Assessment Report.

Dr. Stephen Andersen is the lead author of the Chapter 3 Appendix, Options to Reduce Global Warming Contributions from Substitutes for Ozone Depleting Substances, under Working Group III of the Third Assessment Report.

Neil Leary is on detail from EPA as the head of the Technical Support Unit in Washington, DC for Working Group II of the Third Assessment Report.

John "Skip" Laitner is a contributing author to Chapter 5, Barriers, Opportunities, and Market Potential of Technologies and Practices, under Working Group III of the Third Assessment Report.

Question. Were any of these individuals involved in the IPCC Second Assessment Report?

Answer. Yes. Neil Leary (EPA, Washington, DC) served as an expert reviewer of the Working Group II and III reports of the Second Assessment Report.

Question. If so, please identify the specific roles and responsibilities in the Second Assessment Report?

Answer. Neil Leary (EPA, Washington, DC) served as an expert reviewer of the Working Group II and III reports of the Second Assessment Report.

Request: please provide this list including affiliations and locations.

Answer. Neil Leary, Environmental Protection Agency, Washington D.C.

CLIMATE CHANGE: IPCC SUPPORT FOR PARTICIPATION

Question. Who is being provided EPA support for participation in the IPCC Third Assessment Report and what are the specific topical and Work Group assignments?

Answer. The following people are being provided EPA support for participation in the IPCC Third Assessment Report:

Dr. Terry Root is a Lead Author for the Ecosystems and Wildlife chapter of Working Group II. Dr. Root is affiliated with the University of Michigan, Ann Arbor, MI.

Joel Smith is Convening Lead Author for the Synthesis of Climate Change Impacts and Adaptation chapter of Working Group II. Mr. Smith is with Stratus Consulting Inc., Boulder, CO.

Dr. Charles Howe is a Lead Author for the Water Resources chapter of Working Group II. Dr. Howe is affiliated with the University of Colorado at Boulder, Boulder, CO.

Mr. Bill Easterling is involved in the IPCC Third Assessment Report. He is affiliated with Pennsylvania State University in State College, PA.

Jeff Price is a lead author for the IPCC Third Assessment Report.He is affiliated with Pennsylvania State University in State College, PA.

Dr. Sandra Brown is a Convening Lead Author for the IPCC Working Group II Chapter 5 on ecosystems and their uses. Dr. Brown is also serving as a convening lead author for Chapter 6 of the Land Use, and Land Use Change, and Forestry Special Report. Dr. Brown participated in the IPCC Second Assessment report. Dr. Brown works for Winrock International in Arlington, VA.

Dr. Jayant Sathaye is a Lead Author for the IPCC Working Group III Chapter 5 on barriers and opportunities and market potential of technologies and practices. Dr. Sathaye is also serving as a convening lead author for Chapter 6 of the Land Use, and Land Use Change, and Forestry Special Report. Dr. Sathaye is also a convening lead author for Chapter 7 of the Technology Transfer Special Report. Dr. Sathaye participated in the IPCC Second Assessment report. Dr. Sathaye works for Lawrence Berkeley Laboratories in Berkeley, CA.

Dr. Brian Murray is serving as a lead author for a chapter of the Land Use, Land Use Change, and Forestry Special Report. He did not participate in the IPCC Second Assessment Report. Dr. Murray works for the Research Triangle Institute, in Research Triangle Park, NC.

Mr. William Pepper and Mr. Alexi Sankovsky are serving as contributing authors to the IPCC Special Report on Emission Scenarios. Neither Mr. Pepper nor Mr. Sankovsky participated in the IPCC Second Assessment Report. Mr. Pepper works for ICF Incorporated in Fairfax, Virginia. Mr. Sankovsky works for ICF Incorporated in Washington, DC.

Dr. Lynn Price is a lead author for Chapter 3, Technical and Economic Potential of Greenhouse Gas Emissions Reduction, under Working Group III of the TAR.

Dr. Mark Levine is a lead author of Chapter 3, Technical and Economic Potential of Greenhouse Gas Emissions Reduction, under Working Group III of the TAR.

Dr. Willy Makundi is a lead author of Chapter 4, Technical and Economic Potential of Options to Enhance, Maintain, and Manage Biological Carbon Reservoirs and Geo-Engineering, under Working Group III of the TAR.

Mr. E. Thomas Morehouse (Institute for Defense Analysis in Arlington VA) is a contributing author of the Chapter 3 Appendix, Options to Reduce Global Warming Contributions from Substitutes for Ozone Depleting Substances, under Working Group III of the Third Assessment Report.

Dr. Devra Davis is a lead author of Chapter 8 under Working Group III of the TAR.

Dr. Hugh Pitcher was provided funds to attend a meeting associated with Working Group III of the Third Assessment Report.

Dr. R.N. Stavins is a lead author for the economics chapter of Working Group III of the Third Assessment Report.

Question. Were any of these individuals involved in the IPCC Second Assessment Report?

Answer. Yes.

Question. If so, please identify the specific roles and responsibilities in the Second Assessment Report?

Answer. Dr. Lynn Price was a lead author for Chapter 22, Mitigation Options for Human Settlements, under Working Group II of the Second Assessment Report. Dr. Price is affiliated with the Lawrence Berkeley National Laboratory in Berkeley, CA.

Dr. Mark Levine was the lead author for Chapter 22, Mitigation Options for Human Settlements, under Working Group II of the Second Assessment Report. Dr. Levine is affiliated with the Lawrence Berkeley National Laboratory in Berkeley, CA.

Dr. Jayant Sathaye was a principal lead author for Chapter 24, Management of Forests for Mitigation of Greenhouse Gas Emissions, and a lead author for Chapter 27, Methods for Assessment of Mitigation Options, under Working Group II of the Second Assessment Report. Dr. Sathaye is affiliated with the Lawrence Berkeley National Laboratory, in Berkeley, CA.

Dr. R.N. Stavins was a lead author for Chapter 11, Economic Assessment of Policy Instruments for Combatting Climate Change, under Working Group III of the Second Assessment Report. Dr. Stavins is affiliated with Harvard University.

REQUEST: Please provide this list including affiliations and locations.

Affiliations and locations provided in the answers above.

CLIMATE CHANGE: IPCC PEER REVIEW

Question. What peer review process is used for the science contributions prior to submittal to the IPCC?

Answer. The IPCC is an independent entity that has its own process for producing and peer-reviewing its assessment documents. Lead Authors and Contributing Authors for every chapter of the IPCC Third Assessment Report were nominated by their respective governments and chosen by the IPCC. These authors work together in an independent IPCC process to write their respective chapters. All EPA researchers who are Lead or Contributing Authors, as well as EPA-sponsored authors, work with other researchers from around the world within this independent IPCC process. (In other words, chapters are not first written by individual countries outside of the IPCC process, peer reviewed, and then submitted to the IPCC.)

Once the chapters of the IPCC Third Assessment Report are drafted, they go through a rigorous international scientific review, which includes official government reviews. (IPCC Technical Reports go through an identical peer review process.) The U.S. Global Change Research Program is responsible for coordinating the U.S. government review of IPCC assessment documents. The draft chapters are then revised and submitted for approval by all governments involved in the IPCC process.

It is important to distinguish between U.S. scientific research done for the U.S. National Assessment and research that is done specifically for the IPCC process. These are two independent activities with their own peer-review processes. EPA's Global Change Research Program has insisted that all work that it has sponsored as part of the U.S. National Assessment go through a rigorous peer review process before it is released—including release to anyone involved in the IPCC Third Assessment Report.

As described in our response to Question #34, all of the EPA-sponsored Regional and Sectoral Assessments are being held to the highest standards of scientific excellence. All of the Regional and Sectoral Assessment Reports are being subjected to an extensive peer review process that has been fully documented to ensure that they are scientifically credible, balanced, and unbiased. EPA's Global Change Research Program committed to the Congress that it would insist upon and maintain scientific excellence, openness, and broad-based participation in all of the regional and sectoral assessment reports that it sponsors. EPA has fulfilled this commitment and aggressively implemented a rigorous peer review process.

The following guidelines have been established and followed for the external peer review of the EPA-sponsored regional and sectoral reports:

Technical Review.—A technical review must be conducted to evaluate the accuracy and validity of statements of fact and interpretations of data. Each section of the report should be reviewed by independent experts with technical expertise in the appropriate subject area. These expert reviewers should include persons who are active in relevant disciplines or fields of endeavor but who have not participated in the assessment process.

Comprehensive Review.—Experts with broad scientific and technical expertise relevant to the particular region or sector should review the entire document in a comprehensive manner. These reviewers should not have participated in the assessment process.

Public/Stakeholder Comment.—The report should be circulated for comment to a range of interested parties, including the stakeholders engaged in the assessment and be available to the public upon request during the review period.

Documentation of Reviews and Responses.—A document should be prepared that compiles and summarizes all broad categories of comments, and explains the assessment team's responses.

We also note that the entire assessment process was open and predicated on the involvement of stakeholders. The assessments were launched with workshops to formulate questions and concerns to be addressed by the assessments themselves. A wide range of stakeholders—including for example, representatives from industry, state and local governments, environmental groups—were invited to take part in the workshops. Those who chose to take part had the opportunity to shape the assessment, to participate in it, and to review the assessment report.

CLIMATE CHANGE: PUBLIC ACCESS TO PEER REVIEW INFORMATION ON U.S. NATIONAL ASSESSMENT

Question. How can the public review this material prior to submittal to the IPCC?

Answer. As noted in our response to Question #40, it is important to distinguish between U.S. scientific research done for the U.S. National Assessment and research that is done specifically for the IPCC process. These are two independent activities with their own peer-review processes.

IPCC Review Process.—Once the chapters of the IPCC Third Assessment Report are drafted, they go through a rigorous international scientific review, which includes official government reviews. The U.S. Global Change Research Program is responsible for coordinating the U.S. government review of IPCC assessment documents. The U.S. government review of the IPCC assessment reports is an open and inclusive process. Anyone from the public has an opportunity to participate, review IPCC chapters, and submit comments. These comments are then incorporated into the official U.S. government response to the IPCC.

Following the international scientific review, the draft chapters are then revised and submitted for approval by all governments involved in the IPCC process.

National Assessment Peer-review Process.—EPA's Global Change Research Program has insisted that all work that it has sponsored as part of the U.S. National Assessment go through a rigorous peer review process before it is released—including release to anyone involved in the IPCC Third Assessment Report.

In order to ensure that all of the EPA-sponsored Regional and Sectoral Assessment Reports are scientifically credible, balanced, and unbiased, EPA established guidelines for a rigorous external peer review process that must be followed by the assessment teams. This review process includes a public/stakeholder comment period. EPA's guidelines specifically requires that "The report should be circulated for comment to a range of interested parties, including the stakeholders engaged in the assessment and be available to the public upon request during the review period."

Copies of the assessment reports are available to the public upon request from the assessment teams during the review period. Also, EPA is requiring that each assessment team prepare a document that compiles and summarizes all broad categories of comments, and explains the assessment team's responses. This document will be made available to the public.

We also note that the entire assessment process was open and predicated on the involvement of stakeholders. The assessments were launched with workshops to formulate questions and concerns to be addressed by the assessments themselves. A wide range of stakeholders—including for example, representatives from industry, state and local governments, environmental groups—were invited to take part in the workshops. Those who chose to take part had the opportunity to shape the assessment, to participate in it, and to review the assessment report.

Question. Does EPA maintain a public Internet site that can be used to post this material?

Answer. EPA's Global Change Research Program does not yet have a public Internet site that can be used to post this material. However, each of the universities responsible for conducting the EPA-sponsored Regional and Sectoral Assessments maintain websites. These websites can be used to post this material. For example, The Pennsylvania State University maintains an excellent website on which is posted their Overview document entitled, *Preparing for a Changing Climate: The Potential Consequences of Climate Variability and Change.* The website address is: http://www.essc.psu.edu/mara/index.html

This website also posts documentation of responses to reviewers' comments on a draft version of the Overview report.

Question. Does EPA plan to use this web site for full disclosure of any material transferred for use by the IPCC?

Answer. EPA's Global Change Research Program is in the process of developing a new public website. This website is being developed to further fulfill the Global Program's commitment to the Congress that it will insist upon and maintain scientific excellence, openness, and broad-based participation throughout its program (including in all of the regional and sectoral assessments that it sponsors). An important purpose of this website will be to disseminate data and information. It will provide a portal through which scientists, policy analysts, and the public can access research data, documents, project descriptions and updates, workshop announcements and proceedings, presentations, and analytic tools. It will also provide information produced by the Global Change Research Program's intramural and extramural researchers, including output from the U.S. National Assessment. EPA expects to be able to use this new website for public disclosure.

Related answer from previous Question [NOTE: This has not been cleared with Department of State or others.]

IPCC Third Assessment Report.—Public Review.

Question. How can the public review this material prior to submittal to the IPCC? Will this material be posed on EPA's website prior to submittal to the IPCC?

Answer. EPA will not be leading the review of the Third Assessment Report and currently has no plans for posting this material on the EPA website prior to submittal to the IPCC.

For the Second Assessment Report, the United States Government invited public comment. A Federal Register Notice was published which provided information on how to obtain the report from the United States Global Change Research Program and a mailing address for comments. A team of people then went through all of the comments (from agencies, experts and the public) and put together a set of United States Government comments, taking into account some of the comments received from the public. The United States Government comments were then forwarded to the IPCC. In addition, the United States Government separately forwarded the public comments received during the review process. Individuals can also send comments directly to the IPCC.

CO_2: ANALYSIS OF EMISSIONS REDUCTIONS

Question. On August 8, 1998 Administrator Browner wrote to Chairman Sensenbrenner that "EPA is not attempting in any way to implement the Kyoto Protocol by conducting the multi-pollutant analysis called for in the proposed modification [to the settlement]. EPA does not have any plan to regulate CO_2 from electric power plants."

With this statement in mind, please describe the basis for including CO_2 in the Office of Air and Radiation March 1999 study "Analysis of Emissions Reductions Options for the Electric Power Industry" Please provide a full copy of this study and any presentation material developed.

Answer. EPA has the responsibility under the Clean Air Act to decide whether to regulate mercury emissions from coal-fired electric power plants. Mercury exposure is associated with serious neurological and developmental effects in humans. The March 1999 analysis was an update to a series of multi-pollutant analyses of utility emissions that were first undertaken four years ago. The updated analysis was specifically intended to assist EPA in making decisions on mercury. The information it generated will be considered in making decisions regarding the possible regulation of mercury emissions from electric utility steam generating units under section 112 of the Act.

Multiple pollutant analysis of utility emissions makes sense because any effort to reduce any one pollutant affects the others. In the March 1999 analysis EPA evaluated how much reduction in mercury would result (and at what cost) from various possible scenarios to control mercury. Those model runs also estimate the reductions in other pollutants (NO_X, SO_2 and CO_2) that would result from these possible mercury control scenarios. The analysis also provides estimates of mercury reductions that would result from possible scenarios that reduce emissions of NO_X, SO_2 and CO_2.

EPA routinely uses a widely-accepted computer model, called the Integrated Planning Model (IPM), to undertake these multiple pollutant analyses. EPA has conducted analyses like this for electric power plants for more than three years with broad stakeholder involvement and support. In 1996, EPA conducted the Clean Air Power Initiative (CAPI), a stakeholder process involving utilities, fuel suppliers, labor, and environmental organizations using the IPM model to look at the interaction of control strategies for various pollutants from electric power plants. In that process and in subsequent advisory committee meetings the inclusion of carbon dioxide in these analyses was supported by a broad range of stakeholders including a number of utilities, the United Mine Workers, and environmental organizations.

Multiple pollutant analyses are called for in the Clean Air Act. For example, § 103(g)(1) calls for analyses of "[i]mprovements in nonregulatory strategies and technologies for preventing or reducing multiple air pollutants, including sulfur oxides, nitrogen oxides, heavy metals, PM–10 (particulate matter), carbon monoxide, and carbon dioxide, from stationary sources, including fossil fuel power plants."

CO_2: LEGAL AUTHORITY FOR CAP AND TRADE SYSTEM

Question. What legal authority does EPA claim for assuming a "cap and trade" basis in this study for each of the following emissions: mercury, NO_X, SO_2.

Answer. As the introduction to the study report emphasizes, the options that were analyzed were "hypothetical approaches to emissions controls on the electric power industry for each pollutant." They do not represent an EPA or Administration position on how any of the pollutants should or could be reduced. EPA's authority for conducting this analysis can be found in sections 103 and 112 of the Clean Air Act.

MERCURY RULE NRDC SETTLEMENT

Question. Is the study related in any way with the NRDC settlement in April 1998 related to the Mercury rule?

Answer. An EPA commitment to perform the study was included as part of the proposed April 1998 stipulation modifying an existing settlement agreement with the NRDC. As discussed in more detail in the response to your question, "CO_2 Consent Decree," EPA had already planned to perform this analysis irrespective of the settlement agreement. Including it in the proposed settlement modification helped EPA gain NRDC's agreement to give EPA additional time beyond the then-applicable deadline of April 15, 1998 to determine whether to regulate mercury emissions from electric utility steam generating units.

CLEAN AIR PARTNERSHIP FUND—AUTHORIZATION OF FUNDS

Question. For the fiscal year 2000 appropriations, the Administration included language in the EPA appropriation for "State and Tribal Grants" for a "new" $200 million program called the "Clean Air Partnership Fund," which was not enacted by the Congress (see Budget App. p. 930–931). The request said the "new" program would be carried out under section 103 of the Clean Air Act. The word "new" is in the Budget explanation. This year the fiscal year 2001 appropriation language repeats the request at a lower funding level of $85 million. In light of the provisions of section 327 of the Clean Air Act, why is EPA apparently trying to circumvent the legislative committees of Congress in requesting through the Appropriations Committees funds for a "new" program that appears to be for more than one fiscal year 2001? Is this only a 1-year program?

Answer. Section 103 of the Clean Air Act provides the statutory authority necessary for the award of financial assistance to support activities that would be undertaken as part of the Clean Air Partnership Fund program. Section 103 requires the Administrator to establish a "national research and development program for the prevention and control of air pollution." As part of this program, Section 103(a)(1) requires the Administrator to "conduct, and promote the coordination and acceleration of research, investigations, experiments, demonstrations, surveys, and studies relating to the causes, effects (including health and welfare effects), extent, prevention and control of air pollution." Section 103(b)(3) authorizes the Administrator to make grants to support the activities listed in Section 103(a)(1). The Section 103(b)(3) grant authority thus includes the authority to fund demonstration projects, as well as related studies and investigations, such as those that would be supported through the Clean Air Partnership Fund program.

Section 327 of the Clean Air Act (the Act) authorized appropriations "to carry out this chapter" for the seven fiscal years commencing after the date of enactment of the Clean Air Act amendments or November 15, 1990. This means that there were authorized to be appropriated funds to carry out the Act for fiscal years 1991 through 1997; the section 327 authorization of appropriations expired on September 30, 1998. Nonetheless, EPA can continue to implement a program whose authorization has expired provided Congress continues to appropriate funds for the program. This has been the situation for the Clean Air Act. The Comptroller General has recognized that, as a general proposition, the appropriation of funds for a program whose funding authorization has expired provides a sufficient legal basis to continue the program. 65 Comp. Gen. 524 (1986); 65 Comp. Gen. 318, 320–21 (1986). The enacted appropriation effectively carries its own authorization. See 67 Comp. Gen. 401 (1988); B–219727, July 30, 1985.

Appropriations are presumed to be available for one fiscal year, unless specified otherwise in an appropriation act. The funds appropriated in EPA's State and Tribal Assistance Grants account are specifically "to remain available until expended". With section 103 of the Clean Air Act serving as the grant authority, the Agency's Appropriation Act and the STAG appropriation, enacted after section 327 of the Clean Air Act, would provide the Agency with the authority to carry out a new program with funds made available for the fiscal year of the Appropriation Act and with funds that are carried over and remain available for obligation until expended in a succeeding year.

CLEAN AIR PARTNERSHIP FUND—AUTHORITY FOR MULTI-YEAR PROGRAMS

Question. Section 327 of the Clean Air Act authorizes appropriations for the Act for 7 fiscal years after enactment in 1990 or through September 30, 1998. That authorization has expired. However, a February 16, 2000 White House letter to "Dear Interested Party" from Mr. Roger Ballentine, explains that EPA is re-proposing the "creation of a new" Clean Air Partnership Fund at an $85 million level rather than

$200 million "to achieve reductions in both greenhouse gas emissions and ground-level air pollutants." The letter also states that EPA "will expand its industry partnership programs" to "encourage" businesses to adopt reduction opportunities for the "most potent greenhouse gases" listed in the Kyoto Protocol. The letter clearly implies that both of these programs are for multi-years, not just for fiscal year 2001. If that is right, what is the authority for multi-year programs in light of section 327 of the Act? Is EPA expecting the appropriation process to provide this authorization beyond fiscal year 2001?

Answer. Section 103 of the Clean Air Act provides the statutory authority necessary for the award of financial assistance to support activities that would be undertaken as part of the Clean Air Partnership Fund program. Section 103 requires the Administrator to establish a "national research and development program for the prevention and control of air pollution." As part of this program, Section 103(a)(1) requires the Administrator to "conduct, and promote the coordination and acceleration of, research, investigations, experiments, demonstrations, surveys, and studies relating to the causes, effects (including health and welfare effects), extent, prevention and control of air pollution." Section 103(b)(3) authorizes the Administrator to make grants to support the activities listed in Section 103(a)(1). The Section 103(b)(3) grant authority thus includes the authority to fund demonstration projects, as well as related studies and investigations, such as those that would be supported through the Clean Air Partnership Fund program.

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Appropriations are presumed to be available for one fiscal year, unless specified otherwise in an appropriation act. The funds appropriated in EPA's State and Tribal Assistance Grants account are specifically "to remain available until expended". With section 103 of the Clean Air Act serving as the grant authority, the Agency's Appropriation Act and the STAG appropriation, enacted after section 327 of the Clean Air Act, would provide the Agency with the authority to carry out a new program with funds made available for the fiscal year of the Appropriation Act and with funds that are carried over and remain available for obligation until expended in a succeeding year.

KYOTO PROTOCOL: CLARIFICATION OF PROCEDURES AND MECHANISMS INVOLVING "BINDING CONSEQUENCES" UNDER ARTICLE 18

Question. The Clean Air Report for February 17, 2000 reports that the U.S. delegation, which includes EPA officials, negotiating rules, guidelines, procedures and modalities for the Kyoto Protocol submitted to the Convention Secretariat on January 31 new ideas for enforcement of a country's commitment under Article 3 of the Protocol and of the Kyoto mechanisms. This includes binding consequences for violations.

Is it correct that the Kyoto Protocol does not include any compliance provisions and that Article 18 provides that any procedures and mechanisms involving "binding consequences" must be adopted by amendment to the Protocol after it enters into force?

Answer. As this is a matter of treaty interpretation, we requested the views of the Department of State, which replied as follows: It is not correct to say that the Protocol does not include any compliance provisions. The Protocol contains many compliance-related provisions such as those for monitoring and reporting emissions data (Articles 5 and 7), expert review of implementation (Article 8), and dispute resolution (Article 19). It is also too broad to assert that the only way to adopt binding consequences is through an amendment to Article 18 after the Protocol enters into force. First, the requirement in Article 18 for an amendment applies only to procedures and mechanisms "under this Article." Second, it applies only to noncompliance with the Protocol (as opposed, for example, to not meeting eligibility requirements under other Articles). Finally, it would also be possible for the Conference of the

Parties to modify the Protocol before it enters into force. The Parties would then ratify the modified instrument, not the original Protocol.

KYOTO PROTOCOL: U.S. DELEGATION PROPOSAL OF JAN. 31ST RECOGNIZE ADOPTION BY PARTIES TO PROTOCOL

Question. Does the U.S. delegation proposal of January 31 calling for bans on use of the Kyoto mechanisms and other binding consequences also recognize that such consequences must await adoption by Parties to the Protocol after entry into force of an amendment as provided in Article 18 or does the U.S. contemplate some other process for adopting such consequences?

Answer. The Department of State notes that the U.S. submission of January 31 did not call for "bans" on the use of the Kyoto mechanisms. Rather, the U.S., like other Parties, has proposed certain linkages between annual emissions inventory and reporting requirements and eligibility to use the Protocol's flexibility mechanisms in order to assure the environmental integrity of those mechanisms. The U.S. has proposed that a Party could lose access to the mechanisms only in the case of a failure to meet inventory and reporting requirements so egregious as to undermine the environmental integrity of the mechanisms. In such a case, access to the mechanisms would be restored when the inventory or reporting problem was rectified. Smaller-scale inventory problems would be remedied in other ways and not result in loss of mechanism eligibility. Eligibility requirements would be part of the mechanisms provisions under Articles 6, 12, and 17, not binding consequences under Article 18. Eligibility requirements would thus be adopted by the Conference of the Parties (in the case of emissions trading) or the Conference of the Parties serving as the meeting of the Parties to the Protocol (in the case of joint implementation and the clean development mechanism).

KYOTO PROTOCOL: EFFECT OF PROPOSAL ON PREDICTIONS OF COSTS FOR U.S. TRADING WITH RUSSIA AND UKRAINE

Question. In 1998, the Administration's economic analysis of the Kyoto Protocol stressed that it would not be costly because of the budget period of 5 years, the mechanisms, and sinks. However, the recent submissions by the U.S. delegation appear to undercut the benefits of the budget period and the mechanisms by, in essence, calling for annual reviews for enforcement purposes of a country's inventories, which are merely estimates, and for bans on the use of the mechanisms during the five year period if the reviews find deficiencies in the inventories or if the monitoring and reporting systems are deficient. What will be the effect of that proposal on the predictions about the Protocol's costs for the U.S. and on the ability of the U.S. to meet its commitment over the budget period through the mechanisms, such as trading with Russia and the Ukraine?

Answer. We do not expect there to be any impact on the Administration's cost projections or our country's ability to meet its commitment under the Kyoto Protocol, if it is ratified, as a result of the proposals to which you refer.

The Protocol provides for countries to undertake and report annual emissions inventories, which are to be reviewed each year. As you may know, emissions inventories are already performed and reviewed on an annual basis under the United Nations Framework Convention on Climate Change (UNFCCC), which was ratified in 1992, and Articles 5, 7, and 8 of the Protocol build on these existing requirements. Under Article 3 of the Protocol, a country will be required to show that its cumulative emissions over a five-year commitment period (2008–12) do not exceed its assigned amount, as increased or decreased due to the Protocol's flexibility mechanisms (such as international emissions trading) or its sink provisions. Compliance with Article 3 will be evaluated using countries' annual inventory reports on the basis of cumulative totals at the end of the five-year period.

As explained in answer to the preceding question, the U.S. submissions to which you refer include proposals for certain linkages between annual emissions inventory and reporting requirements and access to the Protocol's flexibility mechanisms in order to assure the environmental integrity of those mechanisms. A Party could lose access to the mechanisms only in the case of a failure to meet inventory and reporting requirements so egregious as to undermine the environmental integrity of the mechanisms. In such a case, access to the mechanisms would be restored when the inventory or reporting problem was rectified. Smaller-scale inventory problems would be remedied in other ways and not result in loss of mechanism eligibility.

Under these proposals, we expect that countries will be able to retain their eligibility to use the mechanisms. As already noted, countries are already performing annual emissions inventories under the UNFCCC, and while improvements in inventories may be needed if the Protocol is ratified and enters into force, there is

ample time to make such improvements before the first commitment period begins. Thus, these proposed linkages would serve as a useful incentive for prompt compliance with inventory and reporting requirements without diminishing the flexibility offered by the five-year budget period, the mechanisms, or sink credits. As a result, we would not expect there to be any impact on the Administration's cost projections or the ability of the U.S. to meet its commitment.

KYOTO PROTOCOL: SOURCE AND REASON OF U.S. PAYMENT OF FINES FOR VIOLATIONS

Question. Some apparently want the countries to pay fines for violations and the Report says the "U.S. would entertain, but does not endorse," payment of fines into a fund to assist developing countries. Why would the U.S. even entertain such an idea and where would the money come from if the U.S. was a violator?

Answer. The Administration does not support mandatory payment of fines for non-compliance.

CO_2 EMISSIONS: STATUS OF PETITION TO REGULATE CO_2 EMISSIONS

Question. What is the status of EPA's consideration of the Oct. 20, 1999 environmental groups' petition for EPA to regulate CO_2 emissions from new cars and trucks? When does EPA plan to respond to the petition?

Answer. On October 22, 1999, a coalition of 19 groups, headed by the International Center for Technology Assessment, submitted a petition asking EPA to regulate emissions of carbon dioxide and other greenhouse gases from new motor vehicles and engines. EPA has made no decision concerning whether to grant or deny the petition. In compliance with the Agency's common practice and requests by members of Congress, EPA plans soon to publish a notice asking for public comment on the petition. The notice will probably provide a 90 day comment period. Several comments have already been received and placed in a public docket that EPA has established for the petition. See docket number A–2000–04. EPA will consider all comments in making a decision on the petition.

KYOTO PROTOCOL: KNOLLENBERG FUNDING RESTRICTION

Question. Under EPA's reading of the Knollenberg funding restriction, the Agency may issue regulations "for a number of purposes, including reduction of greenhouse gas emissions," as long as the regulation is "not for the purpose of implementing, or in preparation for implementing, the Kyoto Protocol." Reducing greenhouse gas emissions is the purpose of the Kyoto Protocol. As a practical matter, what real difference is there between issuing regulations to accomplish the purpose of the Kyoto Protocol and issuing regulations for the purpose of implementing the Protocol? Isn't EPA's reading of Knollenberg permissive rather than prohibitive or restrictive?

Answer. The Clean Air Act authorizes (and, in places, requires) EPA to take a variety of actions to address air pollution problems entirely unrelated to climate change. As elaborated below, some of these actions can also have the indirect effect of reducing greenhouse gas emissions, depending on the sources that are controlled and the types of pollution reduction measures sources elect to use. In addition, certain provisions of the Clean Air Act authorize regulatory actions that directly address emissions of greenhouse gases. These provisions pre-date the Kyoto Protocol and action taken under them carries out purposes articulated in the Clean Air Act itself and does not implement or prepare to implement the Protocol. EPA does not believe that the Knollenberg language bars, or was intended to bar, either of these types of regulatory action under the Clean Air Act.

The Knollenberg language covers EPA's proposal or issuance of a rule, regulation, decree, or order for the purpose of implementation, or in preparation for implementation of the Kyoto Protocol. EPA's regulatory activities implementing the requirements of the Clean Air Act are for the purpose of implementation of those particular requirements of the Clean Air Act, not the Kyoto Protocol.

As noted above, many EPA activities authorized under the Clean Air Act are entirely unrelated to climate change, but have various indirect effects, including reduction of greenhouse gas emissions. For example, control of sulfur dioxide for the purpose of reducing acid rain, or control of nitrogen oxides for the purpose of reducing tropospheric ozone, may have the indirect effect of reducing greenhouse gas emissions, depending upon the sources controlled and the types of abatement measures they elect to use. Protecting human health and the environment from ozone pollution and from acid rain are major goals of the Clean Air Act. The Knollenberg language does not on its face bar expenditures on such activities and it would be unreasonable to assume that Congress intended such an interpretation.

Other provisions of the Clean Air Act authorize regulatory actions that directly address emissions of greenhouse gases, but do not implement or prepare to imple-

ment the Kyoto Protocol. For example, Title VI of the Clean Air Act, enacted in 1990, provides for EPA to take certain actions regarding the health and environmental risks of substances that serve as replacements for ozone-depleting chemicals. Section 612 directs EPA to place limits on the use of particular replacement chemicals if the agency determines that other existing alternatives "reduce overall risk to human health and the environment." EPA believes that a reasonable and common-sense/interpretation of the quoted language includes the consideration of contribution to climate change. Thus, in comparing the "overall risk" of various substitutes for ozone-depleting substances, EPA considers ozone depletion potential, human toxicity, flammability, contribution to global warming, occupational health and safety, and effects on water and air quality. Actions taken under section 612 of the Clean Air Act carry out the purposes of that provision (i.e., ensuring that replacements for ozone-depleting substances do not in turn create new and unnecessary risks). These actions are not for the purpose of implementing or preparing to implement the Kyoto Protocol.

CCTI TAX CREDITS: COST TO TREASURY IN LOST TAX REVENUE

Question. As you know, the Administration is requesting $4 billion in Climate Change Technology Initiative (CCTI) tax credits over five years. What is the cost to the Treasury in lost tax revenue of each of those tax credits? In each case, is the cost in lost revenue greater or less than $14 to $23 per ton of emissions reduced?

Answer. As provided in the President's budget, the tax incentives are estimated to cost $4.03 billion over five years (fiscal year 20001 through fiscal year 2005). The 5-year revenue impact of each tax credit are as follows: energy-efficient building equipment ($201 million), energy-efficient homes ($633 million), solar energy systems ($132 million), electric, fuel cell, and hybrid vehicles ($2,078 million), clean energy ($976 million), and distributed power ($10 million).

CCTI TAX CREDITS: VOLUNTARY PROGRAM COSTS LESS THAN MANDATORY PROGRAMS

Question. Last year, the Energy Information Administration (EIA) estimated, for very similar proposals, that the average revenue loss per ton of carbon reduced or avoided is $133/tonne to $206/tonne. Only the utility co-firing tax credit fell within the $14 to $23 range estimated by Dr. Yellen as the cost of implementing the Protocol via emissions trading and other flexibility mechanisms. In short, all but one of the tax credits failed what might be called the "Janet Yellen Test." The Kyoto Protocol would create mandatory—legally binding—emission reduction obligations. The CCTI tax credit proposals are voluntary. Shouldn't voluntary programs cost less than mandatory programs, not the other way around?

Answer. Please see prior response to "CCTI Tax Credits: Cost to Treasury in Lost Tax Revenue."

NSR REFORM AND RELATIONSHIP TO UTILITY ENFORCEMENT INITIATIVE

Question. While there is considerable debate about how to reform the New Source Review program (NSR) under the Clean Air Act, it appears that almost everyone agrees that this program is overly complex and has imposed a high level of uncertainty and unnecessary burdens on States and industrial sources. In its 1998 notice of availability of further changes to the NSR rules, EPA indicated that its proposed changes would be likely to result in NSR applicability to projects at existing facilities that "increase reliability, lower operating costs, or improve operational characteristics" of production equipment.

Can you explain how reinterpreting your rules to make routine efficiency and reliability projects subject to the NSR permitting process will help to improve this program and reduce disincentives for technology development and deployment?

Answer. In answering this question, it is important to distinguish between two efforts. One is the effort to enforce the existing NSR rules. The other is an effort to reform the NSR rules to promote more flexibility and certainty, as well as reduce the burdens on states and sources, while maintaining at least the same level of environmental protection.

In the context of this first effort, the enforcement action, some industry stakeholders have alleged that EPA has reinterpreted its NSR rules governing the longstanding NSR exemption for "routine maintenance, repair, and replacement." However, the interpretation of "routine" has remained unchanged. Nothing in the recent EPA complaints, notices of violation, or administrative orders indicates that EPA has changed its interpretation of this exclusion nor has anyone identified the prior interpretation that EPA is alleged to be changing. In fact, in a widely publicized 1990 court decision (*Wisconsin Electric Power Co.* vs. *Reilly*) EPA's historical inter-

pretation of "routine" was the subject of litigation, and the interpretation was upheld by the courts.

The EPA is hopeful that its effort to reform the NSR rules will promote flexibility and certainty in NSR permitting to reduce the burden on states and sources and assure an equivalent level of environmental protection as the current program. However, the subject of what is "routine" and the issues raised by the enforcement action are not at issue in NSR reform. Thus, not only have the policies on "routine" not changed in the past, but there is also no proposal to do so in NSR reform.

This question suggests that NSR reform (and specifically the notice of availability) will somehow expand NSR applicability to include projects that "increase reliability, lower operating costs, or improve operational characteristics." As stated earlier, EPA has indicated for years that NSR already applies to these types of changes where they increase emissions. The sentence you reference illustrates this point by stating:

"The EPA's experience leads to the conclusion that sources generally make non-routine physical or operational changes which are substantial enough that they might trigger NSR in order to increase reliability, lower operating costs, or improve operational characteristics of the unit and do so in order that they may improve their market position."

Thus, NSR reform will not subject these types of projects to NSR; they are already subject if they increase emissions. Many changes which a source labels "efficiency" changes can increase emissions by large amounts, and the Clean Air Act requires review of the environmental impacts of these changes. However, if an "efficiency" change does not increase emissions, NSR does not apply, and there is nothing proposed that would cause NSR to apply to a change that does not increase emissions.

EFFECTS OF NSR "REINTERPRETATION"

Question. Don't you think that reinterpreting the law to subject to NSR routine projects that neither increase capacity nor emission rates, but only improve operations will magnify the burdens of the NSR program, increase procedural delays, and further discourage innovation?

Answer. First, it is important to note that before a modification is subject to NSR it must first result in a potential emissions increase. Thus, unless a project to improve operations also results in an increase in emissions, it would not be subject to major NSR. Moreover, as noted above, the EPA is acting consistent with long-standing policy as upheld by the courts and is not "reinterpreting the law." Indeed, the preamble to the 1992 rule revising the NSR regulations applicable to electric utilities specifically states that "changes that improve operational characteristics will be treated in the same manner as any other changes" and thus, when an improvement "is not routine and an emissions increase results from the improvement, that portion of the emissions increase resulting from the improvement will be considered in determining whether the proposed change subjects the unit to NSR requirements" 57 Fed. Reg. 32314, 32327 (1992). Because there has been no change in EPA's interpretation of this exclusion, no increase in procedural delays or discouragement of innovation could have resulted from a reinterpretation.

ENFORCEMENT ACTION AND POTENTIAL BROWNOUTS

Question:. Since EPA's actions could affect potentially thousands of projects and even require prior Agency NSR review of projects designed simply to prevent a deterioration in efficiency, is EPA prepared to accept responsibility for interruptions in service (brown-outs)?

Answer. Again, as stated earlier, a non-routine project designed to prevent a deterioration in efficiency would trigger major NSR only if it also resulted in a significant increase in emissions. EPA's responsibility is to assure that sources comply with the Act by obtaining the necessary permits when they increase emissions. Sources should plan for obtaining the necessary air permits whenever they undertake construction that will increase emissions by a large enough amount. Sources also have other options to legally avoid NSR permitting. These options include "netting out" of NSR or limiting the size of the emissions increase to stay below NSR levels. Therefore, to avoid interruptions in service and possible brownouts, a source should take into consideration its options for compliance with all regulatory requirements (including air regulations) as part of its normal capital and operational planning activities prior to undertaking a construction project that increases emissions. With appropriate planning, sources can readily avoid brownouts and other similar situations.

Moreover, as is the usual practice, the EPA intends to resolve the violations in the ongoing enforcement action in a manner that will not result in brownouts. In-

deed, in the settlement with Tampa Electric Company, the company has ample time to install the necessary emissions control technology and can thus plan the installation so that it minimizes any impact on the ability to meet electricity demand.

NAAQS: AIR ENFORCEMENT DIVISION: APPLICATION OF NEW RULES

Question. What kind of procedures will be put in place to ensure that the Agency's Air Enforcement Division will not become over zealous in the application of the new rules?

Answer. The EPA Air Enforcement Division's priorities are developed after discussion with the Air Program Office. In addition, the Regions, and representatives of state and local air pollution control agencies are consulted before enforcement priorities are set. By using objective targeting methodologies including analyses of compliance data and investigation reports, the Division pursues enforcement cases that result in the greatest environmental benefit while optimizing the use of available agency resources. The Office of Enforcement and Compliance Assurance, which includes the Air Enforcement Division, annually re-evaluates its list of "National Significant Issues" for enforcement, soliciting comment from other offices within EPA. We have also publicized existing requirements through widely distributed Enforcement Alerts.

GREENHOUSE GASES

Question. What other "greenhouse gases" are EPA trying to regulate: methane from agriculture, methane from wetlands, water vapor?

Answer. EPA has no current plans to regulate methane from agriculture, methane from wetlands, or water vapor.

TMDL: NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMITS: FORESTRY ACTIVITIES

Question. What specific forestry activities has the Environmental Protection Agency (EPA) now designated to be point source discharges subject to federal National Pollutant Discharge Elimination System (NPDES) permits?

Answer. Currently, 40 CFR 122.27 designates a silvicultural point source as any discernible, confined and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into waters of the United States. EPA's August 23, 1999 proposal would, if promulgated, add an authority for States and EPA to designate for NPDES regulation, on a case-by-case basis, discharges of storm water from additional silviculture activities such as road building and harvesting. Under the proposal, a State may designate a source only where there is a discharge from a discrete, confined conveyance, a "point source," and where the State determines that the discharge contributes to a violation of water quality standards or is a significant contributor of pollutants. EPA could designate a source under these circumstances as well; however, its authority would be limited further. EPA could designate a source only where there is a point source discharge to a waterbody that is impaired, the silvicultural operation is contributing to that impairment, the Agency is establishing a TMDL for that waterbody, and the Agency believes it is necessary, to designate that source to provide reasonable assurance that the source will meet its allocated load reductions under the TMDL.

TMDL: SILVICULTURAL OPERATIONS REGULATION

Question. Is this the first time EPA will regulate silviculture operations?

Answer. This is not the first time the Agency would be regulating discharges associated with silvicultural operations. The Environmental Protection Agency's (EPA) regulations currently require NPDES permits for discharges associated with log sorting, log storage, gravel washing and rock crushing. (See silviculture regulations at 40 CFR § 122.27).

TMDL: SILVICULTURAL OPERATIONS PERMIT REQUIREMENTS

Question. Does this proposal automatically and categorically subject all silvicultural operations to NPDES permit requirements?

Answer. This rule would not automatically or categorically subject silviculture sources to the NPDES program. If the rule were promulgated as proposed, no additional silviculture sources would be required to obtain an NPDES permit. The proposed designation authority is discretionary, not mandatory, and, under the proposal could be invoked only on a case-by-case basis and under the following circumstances.

A State may designate a source only where there is a discharge from a discrete, confined conveyance, a "point source," and where the State determines that the discharge contributes to a violation of water quality standards or is a significant contributor of pollutants. EPA could designate a source under these circumstances as well; however, its authority would be limited further. EPA could designate a source only where there is a point source discharge to a waterbody that is impaired, the silvicultural operation is contributing to that impairment, the Agency is establishing a TMDL for that waterbody, and the Agency believes it is necessary, to designate that source to provide reasonable assurance that the source will meet its allocated load reductions under the TMDL.

Sources located in States with effective and appropriately protective forestry programs and which are implementing those programs would likely not be affected by this proposal. The intent of this proposal was to provide a mechanism to address those that are not implementing measures to protect water quality.

TMDL: FORESTRY ACTIVITIES DEFINED AS NON-POINT SOURCE

Question. Is it statutory or through regulation that forestry activities are defined as a nonpoint source category and thereby not subject to point source discharge NPDES permit requirements?

Answer. The current exemption from NPDES permit requirements for certain storm water discharges associated with a silvicultural operation is regulatory, not statutory. In other words, there is nothing in the CWA that explicitly excludes storm water discharges associated with silvicultural operations from NPDES requirements. The Agency's regulations currently define certain discharges associated with silvicultural activities as "nonpoint" source discharges therefore, not requiring NPDES permits. These regulations, drafted prior to the 1987 storm water amendments, properly prevent the general application of the permit requirements to countless discharges of storm water from silvicultural operations, the vast majority of which are not "significant contributors" of pollutants to waters of the United States.

Agency regulations established prior to the 1987 Amendments subject some discharges associated with silvicultural activities to NPDES permit requirements; namely, those associated with log sorting and storage facilities and gravel washing and rock crushing activities. (40 CFR § 122.27). Facilities conducting these activities are currently required to obtain NPDES permits.

TMDL: SILVICULTURAL OPERATIONS STORMWATER REGULATIONS

Question. Do the existing storm water regulations enacted after the 1987 Amendments to the Clean Water Act give EPA the authority to designate silviculture as a point source discharge subject to these provisions?

Answer. The 1987 Amendments to the Act created a new storm water program and exempted from the Clean Water Act (CWA) permit requirements, all "discharges" (i.e. a discernable, confined discrete conveyance) of storm water except specified discharges (e.g. some municipal industrial storm water). These amendments also provided discretionary authority to designate specific storm water discharges as needing a permit if they contribute to a violation of a water quality standard or are "significant contributors" of pollution to waters of the United States. (See CWA Section 402(p)(2)(E) and implementing regulations at 40 CFR § 122.26(a)(v)). Under the proposal, it is this discretionary designation authority which would be invoked if and when EPA or a State chose to designate a discharge from a silvicultural operation as requiring an NPDES permit.

TMDL: SILVICULTURAL OPERATIONS IMPAIRMENT OF WATER QUALITY

Question. Does impairment of water quality that might result from silvicultural operations provide the Agency with the justification to designate forestry operations a point source discharge subject to NPDES permits?

Answer. The August 23, 1999, Federal Register notice of the proposed rule explains that for the sources that were categorically excluded previously (nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance), the categorical exclusion from the definition of "point source" would be removed. Instead, on a case-by-case basis, selected sources could be designated for regulation under the NPDES program for storm water discharges under 40 CFR 122.26(a)(v). EPA believes the impacts and potential impacts on water quality of silviculture activities, as reported by States, do justify this use of case-by-case authority to designate discharges of polluted storm water for regulation under NPDES.

TMDL: SILVICULTURAL OPERATIONS POINT SOURCE DISCHARGE

Question. How does EPA now claim after almost 30 years of Clean Water Act legislation, regulation, and case law that silvicultural operations are to be designated as a point source discharge subject to NPDES permits?

Answer. As explained in the August 23, 1999, Federal Register notice of the proposed rule, in 1987, Congress directed EPA to focus on water quality concerns associated with storm water. One of the types of storm water discharges that the Agency identified as appropriate for regulatory control under the NPDES program was storm water discharges associated with construction activity, including clearing, grading, and excavation activities. Storm water discharges resulting from land disturbance have significant potential for water quality impairment due to excessive sediment loads and other factors. Sediment adversely affects aquatic ecosystems by reducing light penetration, impeding sight-feeding, smothering benthic organisms, abrading gills and other sensitive structures, reducing habitat by clogging interstitial spaces within a streambed, and reducing the intergravel dissolved oxygen by reducing the permeability of the bed material.

To date, NPDES regulation of storm water discharges associated with construction activity has protected water quality from the runoff associated with, for example, the construction of roads. A gap in regulatory coverage exists, however, in that the existing NPDES regulations categorically exclude silvicultural road construction and maintenance as well as run-off from several other categories of silviculture activities from the definition of "point source." Therefore, the current silviculture regulation excludes discharges related to all but four categories of silviculture activities (rock crushing, gravel washing, log sorting, and log storage facilities) from the universe of sources that can be regulated under the NPDES permitting program. EPA's August 23, 1999 proposal moved to address this gap by enabling EPA and States to designate, case-by-case, point sources of storm water for regulation under NPDES.

In 1998 the National Water Quality Inventory, 32 States identified forestry as a source of water quality problems that affect more than 20,000 miles of rivers and streams; 220,000 acres of lakes; and 15 square miles of coastal waters.

Several types of silvicultural activities that are currently exempt from NPDES regulation may cause significant adverse impacts on water quality. These include, but are not limited to, road construction and maintenance, site preparation, prescribed burning, clearcutting, and harvesting operations. As mentioned above, the construction and maintenance of roads, other than those constructed for silvicultural operations, are currently subject to NPDES requirements. The construction and maintenance of roads related to silvicultural activities, however, are exempt. Studies demonstrate that such road construction may create significant water quality problems. Results Senator Craig of a study on forest management activities in a small watershed indicated that suspended sediment yields increased almost 8 fold in the first year following road construction, and two-fold following logging in the second year.

Mechanical site preparation by large tractors that shear, disk, drum-chop, or root-rake a site may result in considerable soil disturbance over large areas and has a high potential to deteriorate water quality. Site preparation techniques that result in the removal of vegetation and litter cover, soil compaction, exposure or disturbance of the mineral soil, and increased stormflows due to decreased infiltration and percolation, all can contribute to increases in stream sediment loads. Prescribed burning is another method used to prepare sites that may also have effects on water quality as a result of increased erosion and the altering of soil properties.

The actual harvesting of timber can also contribute to water quality problems. Results from studies have indicated that clearcutting, which is often a method used for timber harvesting, can have significant effects on the nutrient levels and temperatures of nearby waters. The resulting impacts of a logging operation in the Bull Rull Watershed of Oregon include increased nitrate-nitrogen levels for up to 7 years after the harvest and an increase in annual stream temperatures by 2–3 degrees Celsius for the following 3 years after the harvest.

TMDL: FORESTRY COMMUNITY IMPROVEMENT IN WATER QUALITY

Question. What progress has the forestry community made to improve water quality over the last decade?

Answer. The forestry community has worked hard during the last decade to address water quality impacts from silviculture operations. Within the last decade, nearly every state has developed and published Best Management Practices (BMPs). Most states with significant commercial forestry operations routinely conduct assessments of how well their nonpoint source control programs are working. For

those states which have repeatedly measured implementation of BMPs, there is an encouraging trend of improving implementation rates. EPA recognizes that implementing properly designed forest management plans which include appropriate BMPs can result in logging activities that are both economically viable and protective of water quality.

TMDL: FORESTRY PROVISION IN THE CLEAN WATER ACT

Question. Has Congress specifically regulated forestry in any provision of the Clean Water Act?

Answer. Yes, the Clean Water Act (CWA) addresses forestry activities.

EPA regulates point sources discharges from certain forestry under CWA Section 402, the NPDES permitting program. Since 1976, when EPA promulgated its regulations, discharges from certain silviculture activities (rock crushing, gravel washing, log sorting and log storage facilities)have been subject to NPDES permitting based on the interpretation of point source in Section 502 of the CWA. Section 502 does not specifically mention silviculture.

Section 319 provides for the establishment of State nonpoint source management programs to address various categories of nonpoint source pollution, including silviculture. Section 319 does not provide any Federal regulatory authority; nor does it mandate that States employ regulatory approaches. State 319 programs employ a broad range of voluntary and/or regulatory programs to address water quality issues associated with forestry, including publication of technical guidance, provision of technical assistance and financial assistance, conducting audits, and implementing State-established regulatory programs. Section 319 does not specifically mention silviculture, however, states may identify silviculture under their State assessment reports.

Section 404(f) describes exemptions from Section 404 permitting requirements for certain agricultural, silvicultural, and mining activities that result in discharges of dredged or fill material into waters of the United States. Discharges of dredged or fill material into waters of the United States typically require a permit form the Army Corps of Engineers. However, discharges of dredged or fill material associated with normal forestry activities such as harvesting and seeding, as well as for forest road construction and maintenance, are exempt unless they are recaptured under Section 404(f)(2). With respect to forest road construction or maintenance, Section 404(f) requires the use of best management practices to minimize adverse impacts to the aquatic environment.

TMDL: FORESTRY COMMUNITY VIEW OF FORESTRY ACTIVITIES AS NONPOINT SOURCE

Question. EPA states they will only designate forestry activities as a point source discharge in "very narrow circumstances," as a "last resort," and "extremely rare circumstances." How does the forest community view these assurances from the federal Environmental Protection Agency?

Answer. The forest community has indicated their belief that the rule as proposed would lead to a significant number of forestry operations being subject to NPDES permitting requirements. The Agency respectfully disagrees with this assertion. Indeed, EPA believes the case-base-provisions would only need to be used in the specific circumstances described in the proposal as a means to correct water quality impairments resulting from silviculture, where no effective program to address such impacts is in place.

TMDL: FORESTRY EXAMPLES OF EPA IMPOSING LAND USE

Question. Are there current examples of EPA imposing land use forestry requirements on states and forest land owners?

Answer. No, EPA regulations currently require NPDES permits for point source discharges associated with log sorting, log storage, gravel washing and rock crushing. (See silviculture regulations at 40 CFR Section 122.27.) These permits regulate discharges from these activities, not land use.

TMDL: AUTHORITY TO REQUIRE STATES TO DEVELOP REASONABLE ASSURANCE

Question. Does EPA have the authority to require states to develop a "reasonable assurance" policy to achieve a nonpoint source load reduction and submit that policy with a TMDL implementation plan to EPA for approval?

Answer. Yes. The preamble to the proposed rule provides an extensive discussion of EPA's authority to require that an implementation plan be submitted as part of a TMDL and that reasonable assurance be part of that implementation plan. [see pages 46032 through 46034, Federal Register Vol. 64, No. 162, August 23, 1999].

TMDL: FORESTRY ECONOMIC IMPLICATIONS

Question. What are the economic implications of EPA's proposal to designate forestry as a point source discharge subject to NPDES permits?

Answer. The proposed silvicultural designation authority is both limited and discretionary and, if invoked, it would be on a case-by-case basis. By amending the definition of silviculture point source the proposed rule would remove an exemption from the NPDES program for discharges from certain activities associated with silviculture. The removal of this exemption would not automatically and categorically subject any silvicultural operations to NPDES permit requirements. EPA estimates that the costs related to this proposed authority would total $3.7–$13.2 million annually. The estimates include costs to potentially designated silviculture operators for compliance with NPDES permit requirements, and States and EPA for administration and oversight. The costs reflect that these sources would not be subject to NPDES permit requirements unless and until they are designated on a case-by-case basis.

TMDL: BENEFIT-COST ECONOMIC ANALYSIS OF ITS PROPOSAL

Question. Should EPA be required to conduct a thorough benefit-cost economic analysis of its proposal?

Answer. EPA recognizes that the TMDL program is of interest to a wide range of stakeholders, and expects that stakeholders will have an interest in understanding the costs and benefits from implementation of the TMDL program as well as the direct costs of developing TMDLs. While the issues and estimating methods are complex and difficult, EPA is working to develop such information. As this work evolves and its quality is sufficient to meaningfully inform the public, EPA will make it available for public review.

TMDL: NEAR A CULVERT—NONPOINT SOURCE

Question. Is it the position of EPA that any activity that takes place near a culvert will be classified as point source pollution? If not, how does the EPA determine which ones are? Does EPA intend to regulate forestry practices in the headwaters basins when natural runoff flows through a drainage culvert in conjunctions with a forest road?

Answer. EPA's August 23, 1999 notice proposed to allow states and EPA, in limited cases to designate for NPDES permitting, point source discharges of polluted storm water from forestry operations, where necessary to address a clear water quality problem. It is EPA's position, consistent with its regulations at 40 CFR Section 122.2, that a discharge of a pollutant means any addition of any pollutant or combination of pollutants to waters of the United States from any point source. The definition includes additions of pollutants into waters of the United States from surface runoff which is collected or channeled by man. A point source means any discernible, confined, discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, or discrete fissure (40 CFR 122.2). EPA's proposal envisioned that, where a specific forestry activity such as forest road construction and maintenance results in the point source discharge of polluted storm water in a manner that causes or contributes to excursion of water standards, or is a significant contributor of pollutants to waters of the U.S., that point source could be required by the state to seek an NPDES permit. EPA could also require such sources to seek permits on a case-by-case basis, but only where necessary to ensure implementation of an EPA-established TMDL.

COMPLETENESS OF THE CALPUFF MODEL

Question. For FLAG, EPA is requiring long range visibility modeling to use a model not completely available to the scientific community—the CALPUFF model. Also, the company which has the missing piece of the model is not releasing it. Since the model is not completely available, EPA cannot hold a workshop to approve the model

Why is EPA requiring use of a model which is not completely available? Why is EPA requiring use of a model not accepted by EPA? Why is EPA requiring use of a model of which only one company has complete control, creating a monopoly in the modeling community?

Answer. EPA is not requiring use of any particular model as part of FLAG. FLAG is a joint program of the U.S. Forest Service, the National Park Service, and the U.S. Fish and Wildlife Service. EPA has been included in many of FLAG's discussions in an advisory and informational capacity, but is not an active member of the FLAG, nor does it participate in the management or direction of the group.

CALPUFF is, however, part of the Guideline on Air Quality Models which EPA has prepared. EPA has prepared changes to Appendix W of 40 CFR Part 51 that make minor changes to recommendations on visibility calculations. The complete set of proposed changes is about to be published in the Federal Register for a 90-day public comment period. These changes will also will be the subject of the Seventh Conference on Air Quality Modeling in Washington, D.C. planned for June 28–29, 2000. Regarding regional haze, the proposed changes state:

"CALPUFF may be applied on a case-by-case basis when assessment is needed of reasonably attributable haze impairment due to one or a small group of sources. The procedures and analyses should be determined in consultation with the appropriate Regional Office, the appropriate regulatory permitting authority, and the appropriate Federal Land Manager (FLM)."

Thus, it should be clear that EPA has not required the use of CALPUFF for long range visibility modeling or regional haze. The model is, and has been, in the public domain and has been subjected to scientific peer review. It is available free of charge through an independent Internet website which is linked to EPA's website on all air quality models that are used for regulatory applications.

The model (CALPUFF) is, and has been, publicly available through an Internet website free of charge. By mutual agreement with EPA, and for efficiency purposes, the website from which CALPUFF is obtained is managed by the model developer. If this arrangement becomes impractical or untenable and the developer can no longer provide access, EPA will make the model available on its own website. The version of the CALPUFF modeling system currently provided at the independent Internet website is dated March, 1999. The firm that produced the CALPUFF modeling system (which has had many sponsors, of which the EPA is just one) provides beta-test versions of software under development to individuals of its choosing. The EPA has requested the company to provide timely updates to the modeling system as new advances in software are finalized. It is EPA's understanding that the company plans a major update prior to EPA's planned Seventh Conference on Air Quality Models (an open workshop and hearing), in Washington, D.C. June 28–29, 2000.

FLAG: INDUSTRIAL AND SCIENTIFIC COMMUNITY REQUIREMENTS

Question. Scientists trying to meet FLAG requirements in Colorado asked your FLAG member, the National Park Service, in August for boundaries of the Rocky Mountain National Park and the Great Sand Dunes National Monument. The request was made August 5 and again in late December, but to date the scientists have yet to receive the necessary boundary information from your FLAG group. How can the industrial and scientific community meet your FLAG requirements if you do not provide the most basic of information?

Answer. The Federal Land Managers' Air Quality Related Values Workgroup (FLAG) process referred to in this question is managed by the three agencies responsible for managing federal lands. They are the: National Park Service; U.S. Forest Service; and U.S. Fish and Wildlife Service. EPA is not involved in the FLAG process except as a commenter on its development and activities and a provider of technical support.

Information about the FLAG process and underlying technical data, such as Park boundaries for Rocky Mountain National Park and Great Dunes National Monument is currently available on the National Park Service web site: ftp:/ftp.nps.gov/pub/. When you go to this site, choose "park boundaries" from the list of sub-directories.

COEUR D'ALENE: RIFS REPORT AND ROD

Question. On March 22, EPA announced in Coeur d'Alene that the RIFS report and ROD for the Coeur d'Alene Basin would be bifurcated and delayed for up to a year. The State did not have any knowledge of this action they thought we were all working together. This is a major change in direction and could have major impacts on the ability to find a solution in the Basin. Could you explain to me EPA's attitude on working with states on Superfund and specifically what is going on in Coeur d'Alene?

Answer. EPA is and will continue to be committed to working closely with the State of Idaho, the State of Washington, the Coeur d'Alene Tribe and all the stakeholders in the Basin to come up with workable cleanup solutions. As you know, EPA originally proposed to issue a final Record of Decision for the Coeur d'Alene Basin by the end of this year, partly in response to concerns for moving the study process quickly toward cleanup decisions and cleanup actions. Meeting this schedule would

require extremely tight deadlines for stakeholder review of interim technical documents.

Early this year, we began hearing concern that this schedule would not allow enough time for adequate review of data and documents. When Regional Administrator Chuck Clarke traveled to the Basin with Idaho Environmental Director Steve Allred during the first week of March, stakeholders raised concerns that the RI/FS schedule was moving too quickly. During two days of meetings with community members in Coeur d'Alene and Wallace, the possibility of either phasing or delaying the schedule was discussed. Although several people had questions about a schedule change, there seemed to be no opposition to it. By modifying the Remedial Investigation/Feasibility Study and Record of Decision schedule, and phasing the release of cleanup decision documents, EPA believed it was being responsive to stakeholder concerns. EPA also believed that doing so was acceptable to Idaho and Washington states, the Coeur d'Alene Tribe, and other stakeholders. As soon as EPA decided to propose a phasing of the Records of Decision, we immediately notified the Idaho Department of Environmental Quality (IDEQ) staff and other government agencies. We thought we were doing our best to communicate and coordinate with those involved in this decision. We sincerely regret if anyone involved did not receive timely information. EPA Regional Administrator Chuck Clarke spoke with Idaho Environmental Director Steve Allred on March 29, 2000, to discuss important issues related to the site. EPA and IDEQ staff are working together to produce a schedule that will be workable for both agencies.

SRF FUNDING LEVELS FACILITIES

Question. In many Idaho communities, the systems for ensuring safe drinking water and efficient wastewater disposal facilities lag behind modern demands. In some cases, the costs associated with meeting national standards have outstripped a community's ability to pay for necessary upgrades and/or replacement of worn-out or outdated facilities. Do you feel the capitalization grant programs for wastewater and drinking water are adequately funded to meet these concerns?

Answer. Financing for wastewater infrastructure has been, and will continue to be, a partnership between EPA, other Federal agencies, state governments, and local communities. By capitalizing the SRF such that it will be able to provide at least $2 billion in financial assistance to local communities over the long run, the Agency is providing a substantial source of financing consistent with historic levels of Agency contribution. Over $17 billion has already been provided to capitalize the CWSRF, more than twice the original Clean Water Act authorized level of $8.4 billion. Total SRF funds available for loans since 1987 reflecting loan repayments, state match dollars, and other sources of funding are approximately $30 billion, of which $26 billion has been loaned to communities ($4.2 billion was available for loans as of June 1999).

The Drinking Water SRF continues to provide an affordable source of funding for communities to build and upgrade their drinking water facilities to ensure that all public water systems provide drinking water that is safe to drink. Since its inception in fiscal year 1997, $3.6 billion has been provided to capitalize the DWSRF. EPA expects that states will soon make their 1,000th loan under this program representing nearly $2 billion in loan assistance to local communities. EPA's annual performance goal and measure estimates that 1,800 loans will be made and some 450 SRF-funded projects will be initiating operations by the end of fiscal year 2001. The DWSRF program is also fulfilling the goals of the Safe Drinking Water Act (SDWA) with respect to assistance for small systems. Fully three quarters of the loans made to date have gone to small water systems that serve fewer than 10,000 persons. Forty percent of total loan dollars have gone to these small systems, well above the SDWA mandate of fifteen percent.

The Agency acknowledges that needs estimates may be higher than previously estimated. Given that, and the fact that we now have a better understanding of the water quality challenges that states and local governments face, the Administration believes it would be useful to have a dialogue with the Congress and the broad range of stakeholders on the future funding levels and project eligibilities for the Clean Water and Drinking Water SRF programs.

BOISE NAAQS/DESIGNATION ISSUE

Question. Idaho is involved in a comprehensive airshed management effort in the Treasure Valley/Boise Area. EPA is currently considering reimposing a non-attainment designation over a portion of the area which has not had an air quality violation since 1991. The State of Idaho feels such a designation would needlessly divert attention and resources away from the real issue. The real issue being an airshed-

wide management program assuring that the health of Idaho's citizens is protected. Is EPA intending and will they support the State of Idaho's efforts to resolve this issue? If so, by what action?

Answer. The EPA fully supports the State's efforts to resolve this issue, and has been working diligently with all parties in this matter to find a solution that benefits the environment and the people of Idaho. It is our goal to provide the State of Idaho with as much flexibility to implement an airshed plan for the Treasure Valley/Boise area as the law allows when we take action to reinstate the PM10 national ambient air quality standards (NAAQS) in the northern Ada County/Boise area. If the State is successful in developing a comprehensive air quality management plan that addresses the long-term protection of public health and the continued maintenance of the PM10 NAAQS in the area, including assessment of the impact of transportation activities, we will give every consideration to alternative approaches available to EPA in lieu of reinstating the nonattainment designation.

REGIONAL HAZE: IMPLEMENTATION OF RULE

Question. How can EPA be implementing the Regional Haze Rule despite being directed by Congress to implement it only in conjunction with PM/ozone standards?

Answer. EPA is proceeding with work now that will enable the states to coordinate future regional haze implementation plans with any future implementation plans for $PM_{2.5}$ standards. This work is consistent with the TEA–21 legislation and fiscal year 2000 appropriations for regional haze planning activities. EPA has work under way to complete a review of the $PM_{2.5}$ standards by 2002, to complete deployment of the $PM_{2.5}$ monitoring network to characterize ambient air quality, and to provide funding to the states to establish regional planning partnerships for coordinating the development of policy and technical analyses for regional haze. If $PM_{2.5}$ standards are in effect upon completion of the Agency's review of the standards in 2002, EPA and the states will have the necessary monitoring data for designating $PM_{2.5}$ attainment and nonattainment areas in the 2002–2005 time frame.

Consistent with the TEA–21, the regional haze rule links the date for submittal of regional haze control strategy State Implementation Plans (SIPs) in certain states to the dates for designation of $PM_{2.5}$ attainment and nonattainment areas. Thus, control strategy SIPs for regional haze are due in the 2004–2008 time period which encompasses the period that control strategy SIPs would be due for $PM_{2.5}$ nonattainment areas.

Under a specific section of the regional haze rule, certain western states have the option to submit regional haze SIPs in 2003. The timing for these SIPs would not be linked to the dates for designation of $PM_{2.5}$ areas. This approach is consistent with TEA–21 and was included in the haze rule to allow these states to move forward with implementing the set of recommended strategies from the Grand Canyon Visibility Transport Commission within the framework of the regional haze rule.

In addition, EPA has provided funding to states and regional air quality planning organizations to enable them to initiate regional planning activities to address the regional haze program. Many of the activities and analyses done in support of regional planning for regional haze will overlap with implementation of the $PM_{2.5}$ standards, thereby, allowing coordination of these efforts. EPA believes that by taking the steps outlined above, the Agency will be able to ensure coordination of $PM_{2.5}$ and regional haze SIPs as discussed in the preamble to the regional haze rule.

TIMETABLE FOR IMPLEMENTATION OF OZONE/PM/REGIONAL HAZE

Question. What specific timetable will EPA use for implementing PM/ozone standards which allows the Regional Haze Rule to follow?

Answer. The timetable for submittal of state implementation plans (SIPs) in the regional haze rule is consistent with the TEA–21 legislation. As noted in the response to the preceding question, the TEA–21 links due dates for SIPs for regional haze with the dates for designation of $PM_{2.5}$ attainment and nonattainment areas. Regional haze implementation plans for areas designated attainment or unclassifiable for $PM_{2.5}$ are due within 1 year of the designation. Regional haze implementation plans for areas designated nonattainment for $PM_{2.5}$ are due within 3 years of designation, which is consistent with the time period for submittal of plans for $PM_{2.5}$ nonattainment areas. The regional haze rule also allows states the option of participating in regional planning groups and submitting regional haze implementation plans for all parts of the state at the same time, consistent with the timing for $PM_{2.5}$ nonattainment plans. In addition, as noted above, certain western states have the option to submit regional haze SIPs in 2003 allowing them to implement the set of recommended strategies from the Grand Canyon Visibility Transport Commission within the framework of the regional haze rule.

REGIONAL HAZE RULE: COST/BENEFIT ANALYSIS

Question. Did EPA conduct a cost/benefit analysis of the Regional Haze Rule?

Answer. Yes. The Regulatory Impact Analysis is available on the OAR Policy and Guidance web page at: www.epa.gov/ttn/oarpg/t1ria.html.

REGIONAL HAZE RULE: SCIENTIFICALLY PROJECTED REDUCTIONS

Question. What are the scientifically projected reductions in haze?

Answer. In the Regulatory Impact Analysis (RIA) for the Regional Haze Rule, mentioned in the previous question, the Agency estimated reductions in regional haze as a result of the rule out to the year 2015. These estimates in reductions in haze are based on meeting four illustrative progress goals applied nationally over a period of time (10 to 15 years) and based on whether fugitive dust emissions are controlled or not. In summary, 43 to 90 percent of Class I area counties (e.g. counties with national parks) achieve the illustrative progress goals when fugitive dust emissions are controlled, while 31 to 84 percent of Class I area counties achieve the four illustrative progress goals when fugitive dust emissions are not controlled.

REGIONAL HAZE RULE: COST IN CASH OUTLAY

Question. What will the Rule cost in cash outlay by affected emissions sources?

Answer. In the Regulatory Impact Analysis (RIA) for the Regional Haze Rule, the total estimated capital cost (e.g., the costs of installing pollution control equipment) to facilities having to meet requirements associated with these four illustrative progress goals in the projection year of 2015 ranges from $2.8 billion to $15.9 billion when fugitive dust emissions are controlled and from $3.2 billion to $16.3 billion when fugitive dust emissions are not controlled. The total estimated annual cost (e.g. the costs of operating pollution control equipment) nationally to facilities having to meet requirements associated with these four illustrative progress goals range from $1.0 billion to $4.4 billion (1990 dollars) when fugitive dust emissions are controlled and from $0.8 billion to $3.6 billion (1990 dollars) when fugitive dust emissions are not controlled.

REGIONAL HAZE RULE: SOCIO-ECONOMIC COSTS

Question. What are the socio-economic costs?

Answer. In the Regulatory Impact Analysis (RIA) for the Regional Haze Rule, the economic impacts associated with the four illustrative progress goals examined for the regional haze rule in the projection year of 2015 showed that only 0.02 to 0.04 percent of establishments (i.e. facilities or plants) nationwide are expected to have control costs of greater than 1 percent of their sales or revenues regardless of whether fugitive dust emission controls are considered or not. These results suggest that changes in prices of most affected products and changes in prices of fuels and electricity from implementation of the regional haze rule should be relatively small.

DOE PARTICIPATION IN REGIONAL HAZE RULE

Question. Emissions Limits being set are well below those recommended by the Grand Canyon Commission. Also, the Regional Haze Rule has a "regional BART" rather than the statutory site-specific BART. Consequently, the Rule will impose tremendous costs on stationary sources, including power plants, which were not identified as a major source of haze by the Grand Canyon Commission.

Since this rule obviously will affect power plants' operations and permitting, why was DOE not an active part of developing the Regional Haze Rule?

Answer. Like all EPA rules, the Regional Haze Rule went through the interagency review process. The Department of Energy was included in this review process for both the proposed regional haze rule and the final regional haze rule.

REGIONAL HAZE RULE: LEGAL AUTHORITY FOR THE FLAG AQRV "POLICY"

Question. What is the legal authority for the FLAG AQRV "policy"?

Answer. Under the Clean Air Act, the federal land managers have an "affirmative responsibility" to protect the air quality related values (e.g. visibility, ozone impact to terrestrial resources, acidic deposition impacts to aquatic and terrestrial resources) in Federal Class I areas, and they have specific authority to take part in the review of new source permits. The Federal Land Managers' Air Quality Related Values (FLAG AQRV) document is guidance, not standards or regulations, developed to bring more predictability and uniformity to Federal Land Managers (FLM) participation in the permit review process. For more information on their authority to convene a work group to issue this guidance, we recommend that you contact the

federal land managers directly (U.S. Department of Interior—National Park Service, Air Quality Division, and U.S. Department of Agriculture—U.S. Forest Service). We have forwarded a copy of your questions to our contacts in the National Park Service and the U.S. Forest Service.

FLAG: FLAG AQRV CRITERIA

Question. Page 27 of the FLAG's draft Phase I Report issued October, 1999 states, "The FLAG recommendation is designed to prevent new sources from causing visibility impairment." Do FLAG AQRV standards affect legal rights and responsibilities of permit applicants?

Answer. No, the Air Quality Related Values (AQRV) criteria themselves do not affect the legal rights and responsibilities of permit applicants. Applicants are bound by the Clean Air Act and the New Source Review (NSR) regulations implemented by EPA, states and tribes. These regulations have always required consultation with Federal Land Managers during NSR permitting and the Federal Land Managers have always had the responsibility to identify AQRVs and protect them against adverse impacts. The FLAG AQRV work will simply better define what resources in Class I areas are considered AQRVs and how they can be damaged by pollution. This should promote more predictability in NSR permitting but does not alter any of the rights and responsibilities of permit applicants.

FLAG: FLM'S, EPA, AND NOAA FOLLOWING RULEMAKING PROCEDURES

Question. If FLAG standards affect legal rights and responsibilities, the standards are a rule. Why are FLMs, EPA, and NOAA not following rulemaking procedures of the Administrative Procedures Act with their FLAG standards? No public hearing has been held—only a public "meeting" during the holiday season in late 1999 when FLAG members gave no answers to questions.

Answer. Because the FLAG Air Quality Related Values (AQRV) document is guidance that has been drafted by the National Park Service and the U.S. Forest Service, we recommend that you contact them for a full explanation of the procedures followed in developing it. We have forwarded a copy of your questions to the National Park Service and the U.S. Forest Service.

FLAG: DENIED PARTICIPATION SINCE 1995

Question. I understand the public consistently been denied participation in FLAG efforts since at least 1995. Why is this?

Answer. As noted, the Federal Land Managers drafting the FLAG Air Quality Related Values (AQRV) guidance held a public hearing on the guidance in December 1999 and provided a public comment period as well. We recommend that you contact the National Park Service or U.S. Forest Service for more information on these issues. We have forwarded a copy of your questions to the National Park Service and the Forest Service.

FLAG: FLAG AQRV HEALTH-BASED OR NON-HEALTH BASED STANDARDS

Question. Are FLAG AQRV standards health-based or non-health based?

Answer. The EPA has been involved in FLAG only from an advisory and informational capacity. EPA has not been an active member of the FLAG, nor did it participate in the management or direction of the group. We have forwarded your questions to the National Park Service and the U.S. Forest Service and recommend you contact them directly for more information on these issues.

FLAG: STATUTORY COST/BENEFIT ANALYSIS

Question. Did you conduct a statutory cost/benefit analysis on FLAG standards?

Answer. It is our understanding that a cost-benefit study was not performed on this guidance. Because the FLAG Air Quality Related Values (AQRV) guidance has been drafted by the National Park Service and the U.S. Forest Service, we recommend that you contact them with questions about this issue. We have forwarded a copy of your questions to the National Park Service and the U.S. Forest Service.

FLAG: ENVIRONMENTAL BENEFITS

Question. What are the environmental benefits—the haze reductions or other AQRV benefits—you have determined will result from FLAG standards?

Answer. Because the FLAG air quality related values (AQRV) document is guidance that has been drafted by the National Park Service and the U.S. Forest Service, we recommend that you contact them for an explanation of these issues. We

have forwarded a copy of your questions to the National Park Service and the U.S. Forest Service.

FLAG: "ADVERSE" IMPACT THRESHOLD FOR OZONE

Question. Why has FLAG defined an "adverse impact" threshold for ozone at a level below that which occurs naturally? Doesn't this automatically create a tool to block any permit for a new or modified source?

Answer. Because the FLAG Air Quality Related Values (AQRV) document is guidance that has been drafted by the National Park Service and the U.S. Forest Service, we recommend that you contact them for an explanation of these issues. We have forwarded a copy of your questions to the National Park Service and the U.S. Forest Service.

FLAG: MEMBERS DELEGATING OR REQUIRING NON-FEDERAL ENTITIES

Question. Why are FLAG members (EPA, FLMs, NOAA) delegating or requiring non-federal entities, such as permit applicants, to study AQRV issues on federal land? Isn't the study of AQRVs of federal lands something for which you should be budgeting and coming to Congress for appropriations?

Answer. EPA is not a member of FLAG but participates only in an advisory and informational capacity. For additional information on these issues, we recommend that you contact the National Park Service and the U.S. Forest Service. We have forwarded a copy of your question to the National Park Service and the U.S. Forest Service.

FLAG: SCIENTISTS NOTED FOR STUDIES OF AQRVS

Question. Why are scientists noted for their studies of AQRVs (ozone, visibility, deposition) and whose work you use to support the FLAG standards disputing the use of their work and your alleged scientific bases?

Answer. Because the FLAG Air Quality Related Values (AQRV) document is guidance that has been drafted by the National Park Service and the U.S. Forest Service, we recommend that you contact them for an explanation of these issues. We have forwarded a copy of your question to the National Park Service and the U.S. Forest Service.

FLAG: FIRES ON FEDERAL LANDS

Question. Federal lands' fires were identified as a major source of western haze by a 1993 National Academy of Sciences study and by the eight-state Grand Canyon Commission in which EPA and FLMs extensively participated. How does FLAG address federal lands' fires as a major source of haze?

Answer. Since the FLAG air quality related values (AQRV) document is guidance that has been drafted by the National Park Service and the U.S. Forest Service, we have forwarded a copy of your question to the National Park Service and Forest Service and recommend that you contact them for an explanation of these issues. As indicated in the response to your later question on forest fires, EPA has worked closely with the Federal land managers to develop the "Interim Wildland Fire Policy." This policy outlines EPA's approach to dealing with the impact of wildland fire on the PM National Ambient Air Quality Standards. EPA expects to work with the same stakeholders in expansion of this policy to deal with the impact of fire on regional haze.

FLAG: COMPLIANCE WITH STATUTES AND THE CONSTITUTION

Question. Have the FLAG standards complied with:

—the Unfunded Mandates Reform Act?
—the Regulatory Flexibility Act of 1980?
—the Small Business Regulatory Enforcement Fairness Act of 1996?
—the statutory requirement that no buffer zones are allowed for wilderness areas or national parks?
—the Property Clause of the constitution—federal agencies can have oversight of private land use only to the extent federal lands are harmed by private land activities?

Answer. Because the FLAG Air Quality Related Values (AQRV) document is guidance that has been drafted by the National Park Service and the U.S. Forest Service, we recommend that you contact them for an explanation of these issues. We have forwarded a copy of your question to our contacts in the National Park Service and the U.S. Forest Service.

FLAG STANDARDS VERSUS EPA MODELING PROTOCOLS

Question. Does the visibility component of FLAG standards conflict with EPA modeling protocols and requirements?

Answer. The FLAG guidance was developed by those agencies concerned with federal land management so input on this question should be sought from them. EPA has acted in a review capacity on the visibility component of the FLAG guidance and believes that it is based on models and modeling approaches referenced in EPA's Guideline on Air Quality Models. To meet FLAG needs, the applications are sometimes extended beyond what is specified in that guideline. However, EPA staff have reviewed these extended applications and find them consistent with the more general EPA guidance.

CLEAN AIR ACT: FLAG STANDARDS

Question. The Clean Air Act requires federal agencies to comply with stricter-than-federal state clean air laws. Colorado state statute requires a federal agency to factually establish an AQRV impairment exists before declaring an impairment. Colorado state statute also tracks with cost/benefit analysis required by the federal Clean Air Act. The Clean Air Act gives states the authority to define AQRVs. Why do the FLAG standards not accommodate state statutory AQRV protection programs which comply with federal law?

Answer. The Clean Air Act (CAA) requires federal facilities to comply with state requirements respecting the control and abatement of air pollution in the same manner and to the same extent as any nongovernmental entity. This provision of the CAA does not apply to federal agencies in their regulatory capacity. With respect to protecting AQRVs on federal lands, the CAA imposes an affirmative responsibility on the FLMs to protect these values. Because the FLAG Air Quality Related Values document is guidance that has been drafted by the National Park Service and the U.S. Forest Service, we recommend that you contact them for further explanation of these issues. We have forwarded a copy of your question to the National Park Service and U.S. Forest Service.

CLEAN AIR ACT: STATIONARY SOURCES

Question. Why are federal agencies pursuing stationary sources (such as forest prescribed burning) not found to be a major source of western haze?

Answer. Section 169A of the Clean Air Act requires states to develop implementation plans that provide for reasonable progress in remedying existing impairment and preventing future impairment in mandatory Class I Federal areas (such as national parks and wilderness areas). These plans must include two basic elements: (1) measures addressing the best available retrofit technology for a specific set of major stationary sources that emit any pollutant that causes or contributes to impairment in any Class I area, and (2) a long-term strategy for making reasonable progress. The regional haze rule acknowledges that many different types of sources contribute to visibility impairment and it requires states to address all types of sources in the long-term strategy: mobile sources; fire emissions; other area sources; and other stationary sources.

While there are some actions under way by federal and state agencies to address stationary sources contributing to regional haze, there are many other efforts in place to characterize and develop strategies for many types of sources contributing to haze, not just stationary sources. For example, these agencies are also working to develop smoke management programs that incorporate best available control measures to minimize emissions and smoke impacts from wildland fires they manage to achieve resource benefits (e.g., prescribed fires).

CLEAN AIR ACT: REGIONAL HAZE REQUIREMENTS

Question. What is the difference between what federal land managers are willing to do to address haze and what is required of industry?

Answer. As noted in the response to the above question, state regional haze State Implementation Plans (SIPs) need to address a range of source categories that contribute to visibility impairment. For example, certain major stationary sources may be required to implement best available retrofit technology under the rule. The states have the flexibility to implement best available control measures to address other source categories as well, such as fire emissions from federal, state, and private lands.

The EPA understands that the policy of returning fire to the wildlands to address excessive fuel build-up in certain areas is expected to provide the benefit of reduced incidence of catastrophic wildfires and improved forest health over the long term.

It is recognized, however, that this policy will result in smoke emissions that can impact visibility and the National Ambient Air Quality Standards for particulate matter on an episodic basis. EPA understands, based on working with high level managers in the U.S. Forest Service and the Bureaus of the Department of the Interior, that those agencies have agreed to use the best available control measures to minimize emissions and smoke impacts from wildland fires they manage to achieve resource benefits (e.g., prescribed fires). Federal agencies are familiar with several techniques that can be used to minimize emissions from prescribed fires including mechanically thinning fuel levels, burning when fuel moisture is high, mopping up smoldering embers after the fire, and burning on days with proper meteorological conditions. Federal agencies will use smoke management techniques to minimize the potential impact of the smoke emitted from prescribed fires on visibility, regional haze and the national ambient air quality standards. Smoke management techniques consider how prescribed fire emissions will affect air quality and impact smoke sensitive areas under the atmospheric conditions that will exist at the time of the fire.

CLEAN AIR ACT: FEDERAL LAND MANAGERS REDUCTION OF HAZE

Question. Fires of tremendous heat and excessive emissions result from the heavy fuel loading allowed to occur on forest floors (no logging, no clearing blowdown, 100 year policy of preventing natural burns). What are federal land managers willing to do to reduce haze?

Answer. It is EPA's understanding that the U.S. Forest Service and the Bureaus of the Department of the Interior are committed to complying with the National Ambient Air Quality Standards and with national visibility goals for mandatory Class I federal areas while conducting their wildland fire programs. We believe all the federal agencies are committed to using smoke management techniques to minimize emissions and mitigate air quality impacts from prescribed fires.

CLEAN AIR ACT: FEDERAL AND STATE REQUIREMENTS

Question. The Clean Air Act requires federal agencies to comply with states' stricter-than-federal clean air laws. However, in Colorado, FLMs actively worked against legislation requiring them to submit emissions inventories, seek permits, and mitigate fire emissions. FLMs now are threatening to sue Colorado to ensure their emissions are not regulated by Colorado law as allowed by the Clean Air Act. Why are the USFS and NPS resisting federal and state clean air requirements regarding a major source of western haze and the single largest episodic source of haze "federal lands" fires?

Answer. EPA understands that these agencies are prepared to employ the best available control measures applicable to prescribed fires (i.e., smoke management techniques). However, EPA has not had communication with Federal Land Managers regarding their support for Colorado's legislation regarding smoke emissions. Therefore, we cannot comment on their position.

QUESTION SUBMITTED BY SENATOR JON KYL

REVIEW OF PHOENIX'S REVISED SERIOUS AREA PM10 NONATTAINMENT PLAN

Question. As you are aware, the Phoenix, Arizona, area has been struggling with particulate matter air pollution for some time. The EPA Region 9 office has been working with Maricopa County, Arizona, to address Maricopa Country's failure to attain the PM–10 National Ambient Air Quality Standards established in the Clean Air Act. Maricopa County is extremely positive about its experience in this effort.

On December 23, 1999, the Maricopa Association of Governments submitted its Clean Air Act Revised Serious Area Nonattainment Plan to EPA for review. Again, EPA's Region 9 staff have been cooperative and agreed to expedite its review of the revised plan, indicating to county officials that the matter should be resolved by April 3, 2000. In the interim, sanctions were imposed beginning on March 2, that require 2-to-1 offsets for new or substantially modified major particulate sources in Maricopa County. Delay in final resolution of this may result in additional sanctions.

What is the status of EPA's review?

Answer. EPA signed the proposed approval of the revised Phoenix serious area PM–10 plan on April 3, 2000. We committed to Governor Hull to do everything possible to expedite EPA's review of this plan, which was received in draft on January 3, 2000 and officially on February 23, 2000.

On April 3, 2000, EPA's Administrator for Region 9 also signed an interim final determination which, when published in the Federal Register on April 13, stayed the Clean Air Act 2-to-1 offset sanction that was imposed on the Phoenix area on March 2, 2000. It also defers the imposition of the highway sanctions until EPA takes final action on the plan.

EPA's review of the plan was aided by the efforts of Maricopa County Environmental Services Department, the Maricopa Association of Governments, Maricopa County Department of Transportation, and the Arizona Department of Environmental Quality in revising the plan quickly to address the disapproval issues that EPA raised in a November 9, 1999 letter to Governor Hull.

QUESTIONS SUBMITTED BY SENATOR TED STEVENS

RED DOG MINE PERMIT: AGENCY INVOLVEMENT

Question. What has the EPA done to address the concerns regarding the mine's ability to operate in the future under a state Clean Air Permit?

Answer. EPA is always willing to work with companies to ensure that the operation of their facilities is in accordance with the Clean Air Act. Unfortunately, despite months of discussions during which most issues were resolved, EPA continues to disagree with the State regarding whether the Clean Air Act permit for a current expansion project at the mine complies with the Act. Thus, EPA took steps to ensure both the State and the facility acted in compliance with the Act. EPA remains committed to resolving issues with the permit in a manner that minimally impacts the operation of the mine's expansion project. Recently, we have amended our order so that the Red Dog Mine can begin "water-related" construction while we attempt to resolve our concerns about the need for emission controls. The Red Dog Mine will be able to continue to operate in the future so long as they remain in compliance with the requirements of the Clean Air Act.

CO NAAQS REVIEW

Question. Will EPA factor in the conditions faced in Northern Tier communities in reviewing the CO NAAQS?

Answer. The EPA has conducted an air quality analysis of northern tier cities, including the largest cities of Alaska. The EPA analysis has been incorporated into the Air Quality Criteria Document for Carbon Monoxide, which forms the scientific basis for the CO NAAQS review and is about to be released as a final document. The analysis has also been referenced in the air quality section of the CO Staff Paper currently being prepared for public and Clean Air Scientific Advisory Committee (CASAC) review.

CO NONATTAINMENT AREAS: WORKING WITH ALASKA

Question. Is EPA willing to work with the delegation, the local communities, and the State in effort to identify possible solutions to the difficulties Alaska has had in reaching CO attainment?

Answer. EPA will continue to work with the State of Alaska and local communities to find ways to reduce carbon monoxide air pollution in Anchorage and Fairbanks and welcomes the input of the Alaska Delegation. EPA has provided technical and financial support for a number of special projects aimed at gathering scientific information about the sources of air pollution, their relative contributions, and the impacts of various control strategies to abate air pollution levels. These EPA efforts have included:

—vehicle testing in Fairbanks and Anchorage during several winters and under different operating conditions, including the use of engine block heaters ("plug-ins");

—making changes sought by the Alaska Department of Environmental Conservation (ADEC) for the national computer model used to predict vehicle air pollution levels;

—studying driver behavior in Anchorage to document typical idling times for commuters;

—approving a substitution to the contingency measures requested by ADEC (air pollution control measures that are automatically triggered by the failure to attain the national health-based CO standard); and

—conducting CO saturation studies in both Anchorage and Fairbanks to better identify where the highest levels of CO air pollution are being generated within the boundaries of the official nonattainment areas for the communities.

QUESTIONS SUBMITTED BY SENATOR BARBARA A. MIKULSKI

B. CEPACIA: CONTAINED IN BIO-PESTICIDE PRODUCTS

Question. Can you please outline for the Subcommittee what steps the Agency will be taking with regard to the use of *B. cepacia* in bioremediation and what the timetable will be to address this aspect?

Answer. *B. cepacia* may be subject to regulation as a bioremediation application under the Toxic Substances Control Act (TSCA) and is subject to regulation as a pesticide under the Federal Insecticide, Fungicide and Rodenticide Act. EPA is currently examining uses of this microorganism that fall under the purview of either statute, identifying data needs, assessing risks where possible, and considering possible voluntary and regulatory options for addressing risks where appropriate. We met with the Cystic Fibrosis Foundation (CFF) on March 1, 2000 on this issue, and provided a detailed update on our progress as part of a professional meeting sponsored in part by CFS on April 8, 2000. This April 8 update included an examination of the commercial products which could contain *B. cepacia* such as those used for bioremediation, specialty chemical production, and drain cleaners.

While we do not have a definite timetable for any potential regulatory action, we are expediently addressing potential risks posed by *B. cepacia* by taking immediate steps within our statutory authority when possible (under FIFRA, for example). EPA has a continuing dialogue with CFF and, at this time, is attempting to define the issues (with CFF's help). Once we have better information on the scope of the issues (i.e., exposure and potential risk), OPPT will be able to establish a course of action and a timetable for any needed regulatory action.

BURKOLDERIA CEPACIA: USE

Question. Administrator Browner, can you highlight for the Subcommittee what the Agency's plans are to improve, label or re-classify, or remove existing biopesticide products containing *B. cepacia*?

Answer. *B. cepacia* (Burkholderia cepacia) is under review as a result of human health concerns. There may be some impact on uses or registrations of products containing *B. cepacia*, but it is too early in the process to predict. The FIFRA Scientific Advisory Panel (SAP) prepared a report to explain the basis for the risk assessment for microbial pesticide products containing *B. cepacia* and to discuss the scientific issues that have informed this risk assessment. The Agency is currently working to complete its analysis of the SAP report by July 2000. Based upon conclusions drawn from that assessment, the Agency will take whatever actions are necessary regarding the *B. cepacia* products. EPA is not currently registering any *B.cepacia* products until data gaps can be addressed. In addition, Stine Co. has voluntarily withdrawn its registrations, and Agrium, U.S., Inc. recently withdrew its application for a product containing *B. cepacia*.

STATUS OF NSR REFORM RULEMAKING

Question. What is the status of discussions with the complex manufacturer stakeholder group on New Source Review (NSR) reform?

Answer. Some of the members of the group we now refer to as the complex manufacturing group have been actively participating in the NSR Reform effort since it began. Among other activities, various members of this group took part in eight public meetings of the NSR Reform Subcommittee of the Clean Air Act Advisory Committee (CAAAC) in the 1993–94 time frame; commented on a 1994 preliminary draft of the NSR Reform proposal; participated actively in several additional meetings prior to the 1996 summer proposed rule; commented on the proposed NSR Reform Rule that appeared in the Federal Register; testified at a public hearing on the proposed rule; provided input at several subsequent meetings of the CAAAC Subcommittees; and actively participated in another round of meetings that stakeholders requested when EPA released a 1998 Notice of Availability updating several issues within the NSR Reform rule.

Then, in late 1998 during discussions over litigation of the rules governing NSR applicability for utilities, EPA suggested to industry stakeholders to try again to develop a better system for determining what is or is not covered by NSR—one that could receive broad stakeholder support. At this time EPA indicated a desire to complete this last effort in just a few months, given that the NSR Reform stakeholder discussions had been ongoing since 1992. We have made a special effort since then to seek further input from all stakeholders on new approaches that will help achieve this goal. A large stakeholder meeting was convened on February 2–3, 1999, and multiple rounds of follow-up meetings have been held with stakeholders since then including the complex manufacturing group with whom we last met in March 2000.

The meetings we have held this year with the complex manufacturing group have been productive. We are now discussing some of the ideas they raised with other stakeholders, such as environmental groups and state and local agencies, to get their input as well. Once we complete this round of meetings we plan to have an additional meeting with the complex manufacturing group.

SHARING CONTENTS OF FINAL RULE BEFORE PROMULGATION

Question. What do you plan to include in this final NSR reform package?

Answer. As described in the above question, the EPA has engaged in an extraordinarily thorough and inclusive stakeholder process in developing the NSR Reform package. We have held hundreds of hours of meetings with stakeholders representing a very broad cross-section of industry, Federal, state and local governments, and the public. The EPA continues to work with all our stakeholders to be sure that we have a full understanding of their views on the issues raised. However, because the EPA is still involved in stakeholder discussions and internal deliberation, it would be premature to discuss the extent to which we plan to incorporate any specific provisions in the final rule.

NEW SOURCE REVIEW REFORM: ENFORCEMENT ACTION

Question. I understand that the Agency's enforcement office is also involved in the NSR debate. The Agency is pursuing enforcement Actions in several sectors: utilities, pulp and paper, refining, the chemical industry, etc. Why is EPA targeting these industries?

Answer. EPA has conducted very extensive targeting analyses of various industry sectors to ascertain those industries that should be the subject of enforcement initiatives. As a result of those analyses, EPA determined that coal-fired utilities, petroleum refineries, pulp and paper facilities and the chemical industry are large emitters of criteria pollutants, as well as the industries that have high rates of noncompliance with the NSR requirements. EPA will continue to evaluate its priorities and may select other sectors for future enforcement initiatives.

QUESTIONS SUBMITTED BY SENATOR PATRICK J. LEAHY

MERCURY MONITORING: FUNDING FOR UNDERHILL, VERMONT SITE

Question. The uninterrupted monitoring of mercury deposition at the Proctor Maple Research Center in Underhill, Vermont is critical to national and Northeastern mercury monitoring initiatives. In place since 1992, this monitoring station is the longest continuously-running monitor of its kind in the Northeast and is invaluable as a long-term data collection site for mercury monitoring networks, including EPA's Regional Ecological Monitoring and Assessment Program (REMAP), the Northeast States for Coordinated Air Use Management (NESCAUM), and the National Park Service Air Monitoring Program. Despite its national importance, we recently heard that federal funding for the Underhill, Vermont site has vanished this year. I would like to know how EPA can help this monitoring station in the short-term as well as the long-term.

Answer. EPA's efforts to help the Proctor Maple Research Center mercury monitoring site have been many. Since 1992, the Proctor Maple Research Center mercury monitoring site has been funded by the Air Resources Laboratory of the National Oceanic and Atmospheric Administration (NOAA). However, cuts in NOAA's budget over the past several years eventually resulted in NOAA ending their funding of the site in fiscal year 2000. Aware of the decreasing funding, EPA New England began partially funded the Proctor Maple Research Center mercury monitoring site with Regional Ecological Monitoring and Assessment Program (REMAP) funds during fiscal year 1998 and fiscal year 1999. As a part of the EPA Region's mercury monitoring network initiative, the Region also leveraged funds from other EPA programs, such as the National Estuary Program (NEP), Regional Applied Research Effort (RARE), and EPA New England discretionary funds. These funds were provided as a "stop-gap" and not expected to support routine long-term monitoring. In 1999, EPA New England approached the Vermont Department of Environmental Conservation (VTDEC) to consider partial funding of the Proctor Maple Research Center mercury monitoring site. The VTDEC declined to support the site because of insufficient funds.

Over the next several years, the EPA Office of Air will provide additional grant funds to promote state air toxics monitoring programs. Federal funds for these programs may be used to support mercury monitoring sites such as the Proctor Maple Research Center site. In addition, the EPA Office of Research and Development is

developing a Mercury Research Strategy, expected to be finalized this year, which will address research questions in various areas, including human health, exposure, ecological effects, transport and fate, and risk management. It also will address various research questions for mercury deposition.

In addition, the newly formed New England Governors and Eastern Canadian Premiers Mercury Research Workgroup is considering the completeness of ambient mercury monitoring New England and maritime Canada. EPA New England is a member of this Workgroup and will promote the continuation of the Proctor Maple Research Center mercury monitoring site.

MONITORING MERCURY: EPA'S LONG-TERM PLANS

Question. In addition, I would like to know EPA's long-term mercury monitoring plan for U.S. air, land, and water—especially in the Northeastern states.

Answer. Several important monitoring efforts are underway. In particular, EPA recently developed a draft concept paper outlining the development of a nationwide air toxics monitoring network (which would include air concentrations and deposition). The initial focus of the network will be the operation of selected pilot studies in major U.S. cities to assist the design of a long-term network that will be used to support application of air toxics models and characterize trends in air toxics concentrations. The draft concept paper and initial program have been guided by a steering committee consisting of EPA and state and local agency representatives. The paper has undergone peer review by EPA's Science Advisory Board. Mercury is discussed in the draft concept paper and mercury monitoring eventually will be brought into the national network.

EPA is also undertaking or supporting various mercury monitoring activities, including:

—the Mercury Deposition Network which maintains sites throughout the U.S. to measure mercury deposition as part of the National Atmospheric Deposition Network;

—a National Sediment Inventory established by EPA to provide information on sediment quality;

—EPA's Environmental Monitoring and Assessment Program (EMAP) which provides estimates of changes in the nation's ecological resources on a regional basis;

—a National Survey of Chemical Residues in Fish to determine methylmercury and other chemical contaminants concentration in freshwater fish during the time period from 1999 though 2002

—the National Health and Nutrition Examination Survey (NHANES) human monitoring program which has been expanded to measure mercury in blood and hair along with dietary records. This study will allow better characterization of exposure of the U.S. population to mercury.

In addition, as part of developing EPA's Mercury Action Plan, we are considering additional ways to assist in the coordination of the monitoring efforts of various Federal, state and local agencies.

We will keep you and others in Congress apprised of our mercury monitoring plans as we proceed.

TMDL REGULATION: ASSISTANCE TO FARMERS AND LANDOWNERS

Question. Through the work of the Lake Champlain Basin Program and the Northern Forest Lands Council, we have learned that the conversion of forest and farm land to urban/suburban use represents the greatest threat to our environment, especially our water quality. Contaminants from non-agricultural and non-silvicultural non-point run-off are many times greater than farm and forest land run-off on a per acre basis. Therefore, we are very concerned with any approach to water quality improvement which, however well-intentioned, inadvertently forces farmers out of business or encourages the sale and conversion of working forests to developed land.

For this reason, I have authored legislation such as the Environmental Quality Incentive Program (EQIP) which provides cost-share funding to help farmers and landowners implement water quality improvement practices. These include animal waste storage, riparian protection and erosion control. These programs have long waiting lists of farmers and landowners yet also have woefully insufficient public funding. In past years I have specifically included EPA appropriations to fund such cost share pilot programs in specific watersheds such as Vermont's Lake Memphremagog.

Can you outline for me how your agency would reconcile its proposal regarding TMDL regulation with my concerns? I would like to know specifically how EPA

would work with states such as Vermont to sustain working farms and forests through popular and effective voluntary conservation programs—and not unintentionally drive them to sell lands for further development.

Answer. EPA shares your concerns about sustaining working farms and forests and supports using popular and effective voluntary conservation programs, such as EQIP, to help farmers and landowners implement management practices needed to improve water quality.

As Assistant Administrator J. Charles Fox stated in his April 5, 2000, letter to the Honorable Bud Shuster, EPA regrets the confusion about treatment of diffuse runoff in our August TMDL proposal and wants to specifically clarify that EPA remains committed to relying on voluntary approaches to reduce runoff from diffuse water pollution sources. The proposed rule would not require Clean Water Act permits for polluted runoff. In fact, voluntary and incentive-based approaches, which are often as you note supported by financial assistance from the Federal government, are the preferred way to address these problems. EPA has proposed that state grant funds for polluted runoff programs be increased from $200 to $250 million in fiscal year 2001 and the President has also requested a $1.3 billion increase in authorized levels for conservation assistance programs at the US Department of Agriculture.

MTBE STUDIES: PUBLIC ACCESS TO INFORMATION

Question. I strongly support the recent announcement by the Environmental Protection Agency (EPA) and the United States Department of Agriculture (USDA) to significantly reduce or eliminate the use of the fuel additive MTBE (methyl tertiary butyl ether) and to increase the use of safe, renewable alternatives such as ethanol. I understand that studies have been done to measure the quantity and spread of Volatile Organic Compounds (VOCs), including MTBE, in the nation's ground water and drinking water wells. Has EPA made this information available to the public? If so, please let me know how this information can be accessed.

Answer. EPA has entered into a cooperative study with the U.S. Geological Survey (USGS), titled the "12-State MTBE/VOC Drinking Water Retrospective." This study assesses MTBE occurrence and distribution in 12 Northeastern and Mid-Atlantic States. While the release of the final report is expected by early Fall 2000, preliminary data from the study were presented to a Blue Ribbon Panel in April 1999. This information is available at the Blue Ribbon Panel's Internet website address of: http://www.epa.gov/oms/consumer/fuels/oxypanel/blueribb.htm

ACID RAIN: CAP AND TRADE APPROACH

Question. As published in the recent "Progress Report on the EPA Acid Rain Program," sulfur dioxide emissions and total acid deposition have declined in the Northeast since the passage of the Clean Air Act Amendments of 1990. However, the decreases in acid precipitation have not been enough. High-elevation soils, lakes, and other critical habitats throughout Vermont and the northeast continue to receive high levels of acid precipitation, from both sulfuric and nitric acid components. Environmental scientists agree that ecosystem recovery from the damaging effects of acid precipitation may take twenty to fifty years at least.

EPA has often proposed that a cap-and-trade approach to nitrogen oxides will help alleviate the northeastern acid rain problem. Please outline how this program would work and, based on what is known about sulfur dioxide emissions trading patterns and the differences between major SO_2 and NO_X sources (power plants vs. vehicles), what decreases you expect in total acid deposition in the northeast over the next 10 years of such a program. Also, please explain how you will monitor the effect of the acidity trends over time in the regional ecosystems that are most affected by acid deposition.

Answer. With regard to recovery of sensitive ecological systems in the Northeast, EPA agrees with observations in the recent GAO study, entitled *Acid Rain—Emissions Trends and Effects in the Eastern United States*. Despite significant reductions in sulfur dioxide (SO_2) emissions, decreases in total sulfur deposition and declining surface water concentrations of acid anions, many of the most sensitive ecosystems in the Northeast have not demonstrated significant recovery. Recent studies attribute lack of recovery to two important factors. First, base cations in watershed soils have been severely depleted due to many years of leaching caused by acid deposition reducing the acid buffering capacity of soils. Second, despite reductions in SO_2 emissions and sulfur deposition, significant reductions in nitrate deposition have not been observed due to relatively constant emissions of nitrogen oxides (NO_X) over the past 20 years. Scientists contend that both further reductions in SO_2 and significant reductions in NO_X emissions may be necessary to ensure recovery

of the most sensitive ecosystems. EPA has been aggressively pursuing NO_X reductions through the 22 state NO_X SIP Call, Tier II/low-sulfur vehicle standards, and the Section 126 NO_X petitions. These rules will reduce 2.3 million tons of NO_X annually in 2010.

EPA believes that if a national, annual NO_X reduction effort is developed, a NO_X cap and trade program would provide the most cost-effective means to achieve reductions. Such a program would likely be set up much like the current sulfur dioxide cap and trade program, which has been highly successful in providing significant, low cost, early reductions resulting in benefits to health and the environment. For the first time under the Clean Air Act (CAA), in 1994, EPA began collecting actual hourly emissions data (SO_2, NO_X, CO_2) from large power generating sources through Continuous Emissions Monitoring systems (CEMs). There has been 100 percent compliance with the SO_2 emissions reduction requirements for this section of the Clean Air Act. Utility SO_2 emissions have dropped by over 5 million tons annually relative to the 1980 baseline. The first five years of the program have produced SO_2 reductions in every state and beyond the legal requirement in almost every affected state. The greatest reductions occurred in the highest emitting areas (Midwest). Full implementation will achieve a 10 million ton SO_2 reduction, approximately 40 percent below 1980 levels. Full compliance cost is now expected to be about $1 billion per year, based on a combination of scrubber installations, coal substitution, fuel switching and other approaches, as opposed to the $4 to $7 billion per year cost projected in 1990 at the time of enactment.

Such impressive results achieved under this program have resulted in expressed interest in cap and trade as a successful model for implementing other pollutant reduction programs. A similar, ongoing program modeled on the SO_2 program already provides a template for a program targeted at nitrogen oxides. The Ozone Transport Commission (OTC), composed of 12 Northeastern states and the District of Columbia, is implementing a cap and trade program to reduce summertime NO_X emissions during the ozone season. Preliminary results from 1999 (the first summer of operation) indicate that the OTC NO_X Program is achieving its goal of reducing ozone season NO_X emissions. There has been a 55 percent reduction since 1990 by the eight states currently participating in the program. Emissions were reduced 20 percent below required levels and NO_X allowance costs are well below early estimates. When the program is fully implemented in 2003, summertime NO_X emissions in the Northeast will be reduced by 70 percent (from 1990 levels), resulting in lower ozone levels and improved health for Northeast residents. The OTC NO_X Program demonstrates that emission cap and trading mechanisms can achieve significant NO_X emission reductions and improve air quality in the United States at a lower cost than traditional command and control approaches.

One important distinction must be made, however, between the current OTC NO_X budget trading program designed to address summertime ozone levels and any program designed to better lead to recovery of sensitive ecosystems. In order to address the most biologically sensitive time period (spring), it is vital that a program achieve annual reductions, rather than seasonal reductions, to ensure benefit to ecosystems.

One crucial means of determining ecological response and recovery involves monitoring pollutant concentrations in precipitation, deposition of pollutants to land and water, and the response of sensitive ecosystems. Efforts to assess the impact of the CAA should focus on national and regional long-term monitoring programs such as the NADP (National Acid Deposition Program), which monitors wet deposition, and EPA's CASTNet (Clean Air Status and Trends Network), which monitors dry deposition, rural ozone and other forms of atmospheric pollution. In addition, it is important to monitor status and trends in sensitive ecosystems in receptor areas through networks such EPA's LTM/TIME (Long-Term Monitoring Program/Temporally Integrated Monitoring of Ecosystems), which monitors surface water chemistry at 135 sites in the Northeast (currently 14 in Vermont, reduced from 36 in 1980 and 24 in the early 1990s). Such regional and national long term monitoring programs are essential to understanding the overall impacts of the Clean Air Act to the environment, including recovery of ecosystems. Although current patterns of SO_2 trading have produced no negative consequences for sensitive ecosystems, such monitoring systems are the best means for measuring performance in the future.

Total acid deposition reduction in the Northeast over the next 10 years depends on assumptions of additional levels of reduction. Under the current Clean Air Act, EPA is expecting an additional 10 percent reduction in sulfate and nitrate deposition to Northeast ecosystems. Several proposals before Congress call for additional SO_2 and NO_X reductions from power generation of 50–60 percent and 60–75 percent, respectively. Our experience with cap and trade programs and understanding of atmospheric chemistry suggest that sulfate and nitrate deposition reductions due to power generation emissions would be approximately proportional to these emissions

reductions. However, it should be noted that power generation currently comprises about 65 percent of total sulfur dioxide emissions and about 30 percent of nitrogen oxide emissions. Therefore, deposition reductions would also be affected by the relative proportion of other emissions sources. Ascertaining the ecological effects of such deposition levels over time depends entirely upon continuing essential long-term monitoring programs such as NADP, CASTNet, and LTM/TIME.

VERMONT SCHOOL ENVIRONMENTAL HEALTH INITIATIVE: AGENCY ASSISTANCE

Question. The Vermont Legislature is currently considering indoor environmental health legislation known as the School Environmental Health Initiative. An EPA indoor air quality specialist had been detailed to the Vermont Health Department and gathered a great amount of data that informed Vermonters about air quality issues in the state's schools. Unfortunately, the appointment of this specialist recently ended and has not been renewed. Would your agency support an extension of this specialist or a similar assignment of an appropriate EPA staffer to assist Vermont in its School Environmental Health Initiative?

Answer. The Agency does not support an extension of this specialist to assist Vermont in its School Environmental Health Initiative because the assignment has reached a successful conclusion. The staffer was detailed to the State of Vermont two years ago to pilot test both the EPA's Indoor Air Quality (IAQ) Tools for Schools implementation strategy and the Agency's approach to training school personnel and other stakeholders on improving the indoor environment in schools. This appointment worked to the benefit of EPA by: (1) providing the Agency with first-hand experience at the local and state level that proved invaluable in revising the Indoor Air Quality Tools for Schools kit and (2) refining the schools' training and outreach materials.

EPA's Region I office in Boston, MA, is responsible for providing support and technical assistance to the New England states, and is particularly active in promoting the voluntary implementation of IAQ Tools for Schools. Please do not hesitate to contact our Regional Administrator, Mindy Lubber, and advise her of your desire for assistance.

QUESTIONS SUBMITTED BY SENATOR ROBERT C. BYRD

NITROGEN OXIDE (NO_X) REGULATORY ACTIONS TO ADDRESS AIR QUALITY

Question. In November 1997, the Environmental Protection Agency (EPA), issued a draft ruling on its regional NO_X SIP Call which primarily focused on the transport of nitrogen oxide emissions discharged from electric power and other manufacturing sources. In September 1998, the EPA issued the final NO_X SIP Call rule requiring stringent reductions of NO_X primarily emitted from electric utilities and other industrial facilities in the Midwest and Southeast. In October 1998, Midwestern and Southeastern states and the electric utilities from those states challenged the EPA NO_X SIP Call rule in the U.S. Circuit Court of Appeals for the D.C. Circuit because of its stringency and limited compliance schedule (*Michigan* vs. *EPA*). On May 25, 1999, the same court issued an indefinite stay on the submission of SIP Calls for states until the court ruled on the merits of the NO_X SIP Call suit. Oral arguments on the SIP Call rule were heard by the court on November 9, 1999, and on March 3, 2000, the court issued a decision relating to the EPA's September 1998 rule on regional NO_X SIP Call rule. The court upheld most aspects of the SIP Call rule. Given the continued existence of a court stay of the states' deadlines to submit their SIP Calls and the year and a half delay since first issuing the SIP Call rule, it seems reasonable to assume that the schedule for compliance with the rule and installation of emission controls on affected utilities and industrial sources should also be delayed.

The EPA has also recently issued a final rule under Section 126 of the Clean Air Act directing almost 400 utility and industrial sources of NO_X to meet a stringent NO_X standard by May 2003, not much more than three years from now. Thus, state environmental agencies and the regulated sources may now be faced with separate regulatory programs with different compliance schedules affecting the same electric and industrial sources.

The electric utility industry and several states have raised concerns about the ability to comply with the stringent NO_X SIP Call reduction requirements in a very short time frame (by May 2003) without threatening the reliability of the electrical supply in many regions in the affected states. The North American Electric Reliability Council and the East Central Area Reliability Council have issued two separate reports indicating that a compliance May 2003 deadline poses a potential

threat to reliability. Additionally, the Section 126 Petition deadlines do not comport with the NO_X SIP Call rule if and when the stay is lifted by the D.C. Circuit Court of Appeals.

Administrator Browner, are you considering administratively revising the compliance deadlines for the Clean Air Act's Section 126 Petition sources so that those deadlines will be consistent with the compliance schedule established by the NO_X SIP Call rule once the U.S. Circuit Court of Appeals for the D.C. Circuit rules on lifting its stay on the NO_X SIP Call? If this is not the case, why not?

Answer. EPA does not see any reason to change the compliance deadlines for the sources subject to the action EPA took in December 1999 when it granted states' petitions requesting relief from pollution caused by sources in upwind states. The petitioning states have the right under the Clean Air Act to relief and the temporary stay of an independent action (the NO_X SIP Call) does not deprive these states of the relief to which they are entitled. The United States Court of Appeals for the District of Columbia Circuit denied petitioners request last year to stay the Section 126 action. EPA did a careful and thorough analysis that demonstrated that it is feasible for the covered sources to comply with the Section 126 action without adversely impacting reliability of the power supply.

Sources regulated under Section 126 and the NO_X SIP Call need not be subject to separate regulatory programs with different compliance dates. If a state submits and EPA approves a SIP revision meeting all the requirements of the NO_X SIP Call (including providing for control measures to be in place by 2003), then EPA will withdraw the Federal requirements for sources in that state subject to the Section 126 action. Furthermore, as discussed in more detail in response to the following question, EPA believes that May 1, 2003, is the appropriate compliance deadline for the primary portion of the NO_X SIP Call.

NO_X SIP CALL: COMPLIANCE DEADLINE REVISION

Question. The North American Electric Reliability Council and the East Central Area Reliability Council have issued two separate reports indicating that a compliance May 2003 deadline poses a potential threat to reliability. Is the EPA willing to take the necessary steps to avoid the possible threat to the reliable supply of electricity as indicated by these reliability studies?

Answer. EPA has taken steps to protect the reliable supply of power. Before issuing the NO_X SIP Call and taking final action on the section 126 petitions, EPA carefully analyzed whether a May 2003 deadline posed a potential threat to reliability. (See *Feasibility of Installing NO_X* Control Technologies by May 2003, EPA Office of Air and Radiation, September 1998). EPA projected that compliance with the SIP Call will require the installation of selective catalytic reduction (SCR) on 72.9 GW worth of coal fired capacity. Furthermore EPA believes that past experience in both the U.S. and Germany shows that SCR can be installed in outage periods of five weeks or less. EPA examined a worse case study where 62.3 GW worth of SCR were installed in a one year period and where SCR installations required 9 week outages. Even under these extreme conditions, EPA's analysis found no threat to reliability. As an added precaution to protect the reliable supply of power, EPA included a compliance supplement pool in both the SIP Call and the section 126 action. This special provision is designed in part to protect the reliability of the power supply and assist facilities that cannot install controls by May 1, 2003, despite their good faith efforts to do so. Under the Compliance Supplement Pool as established in the SIP Call, at states' options, a total of 200,000 tons of credits would be available that facilities could either buy from a facility that reduced its emissions early or be given by the state. If states decide to use this pool, it could allow some units to delay installation of controls beyond May 1, 2003.

EPA believes that the North American Electric Reliability Council (NERC) Study supports EPA's analysis. First NERC's study explicitly acknowledges that there are fewer concerns about the impact that the Section 126 rule will have on reliability. Second, most of the scenarios that NERC examined did not indicate reliability problems. For example NERC did not find any reliability problems when there were 30 months available for installation of controls. Additionally, NERC did not find reliability problems when 72.3 GW worth of SCR was installed in 18 months with 9 weeks required for installation of controls. It is only when NERC combined a number of extremely conservative assumptions that they found a significant impact on reliability.

East Central Area Reliability Council's (ECAR's) study predicts reliability problems, but it is based on extreme assumptions about the availability of electricity and the installation of control equipment. ECAR, which is a subregion of NERC, began with the premise that the system is on the verge of having reliability problems even

without the SIP Call. This is not consistent with the assumption NERC used. Furthermore, ECAR makes some very conservative assumptions about the amount of new electricity generation that may come on line over the next several years and the availability of existing power plants. The more new electricity generation that comes on line, the less likely it is that reliability problems will occur. ECAR assumes that approximately 9900 MWs of generation will come on line by 2008. In contrast, the Electric Power Supply Association reports that more than 10,000 MWs of capacity already have been announced to come on line before 2003.

BEVILL WASTES: REPORT TO CONGRESS

Question. Administrator Browner, I understand that in March 1999, the EPA issued a report to Congress on the wastes from the combustion of fossil fuels. In that report, the EPA concluded from its nineteen-year technical study that the regulation of these wastes should generally remain the responsibility of the states and should remain exempt from federal hazardous waste regulations. Is this the case and is the EPA preparing a Federal Register notice that is contrary to previous findings in its report to Congress?

Answer. In the Report to Congress, EPA indicated a preliminary decision that disposal of coal combustion wastes should remain exempt from regulation under RCRA Subtitle C, although we noted that these wastes contained levels of arsenic that caused the Agency some concern. We also identified specific situations where we had particular concerns with the disposition or uses of coal combustion wastes.

In comments on the Report to Congress, EPA received significant new information related to damage to human health or the environment. This coupled with the fact that a large fraction of facilities do not have basic environmental controls in place (e.g., 62 percent of all utility surface impoundments do not employ groundwater monitoring), we became further concerned that damage to ground water may be going undetected. Ultimately, on April 25, 2000, EPA issued a regulatory determination in which we explained that we would continue to exempt coal combustion wastes from being regulated as hazardous wastes but we also explained that we would develop national regulations under non-hazardous waste authority (RCRA Subtitle D) for coal combustion wastes when managed in landfills and surface impoundments or when used to fill underground or surface mines.

Question. Can you explain to the Congress and the industry why your agency is not prepared to follow the recommendations made by your own technical staff, based on nineteen years of study?

Answer. Ultimately, relying on all of the information that was available to us, we determined that the best way to ensure that appropriate controls were applied at all coal combustion facilities would be to continue to exempt coal combustion wastes from being regulated as hazardous wastes and to develop national regulations under non-hazardous waste authority (RCRA Subtitle D) for these wastes when they are managed in landfills and surface impoundments or when used to fill underground or surface mines.

ENERGY POLICY IMPLICATIONS AND THE EPA'S REGULATORY ACTIONS

Question. In the past three years, the EPA has promulgated four major new regulatory requirements and announced an intention to focus on the electric utility industry to achieve improvements in air quality goals. These rules include the following:

—New national ambient air quality standards for ozone;
—New national ambient air quality standards for fine particulates ($PM_{2.5}$);
—Regional NO_X SIP Call;
—Section 126 petitions from Northeast states to require stringent NO_X reductions from specified electric utility and industrial sources in the Midwest.

In addition the EPA is in the process of finalizing a new rule to reform the existing New Source Review regulatory program affecting existing electric generation sources. The EPA has also, in this regard, filed suit against eight electric utilities alleging that these companies have illegally modified their older power plants in violation of the existing New Source Review regulations.

Finally, the EPA has reportedly reconsidering nineteen years of evidence and a March 1999 report to Congress on how to regulate coal combustion waste products by recommending that some yet unspecified regulatory action may be warranted.

Answer. The cumulative effect of these actions is likely to significantly drive up the cost of coal-fired electric generation, force the retirement of some existing coal-fired power plants, as well as encourage the replacement of coal-fired generators with natural gas at other facilities. Currently, coal provides fifty-six percent of the nation's electricity. It is also the source of an affordable and reliable domestic supply

of energy. All of these actions are occurring at a time that the share of electric generation from nuclear power is declining and generation from hydro power is not increasing. Additionally, it remains uncertain whether gas and renewable energy sources are in a position to completely fill this potential energy gap. Finally, the Energy Information Agency reports that the overall demand for electricity will continue to rise in the future. At this time, many states and the federal government have already taken action or are considering restructuring the electric power industry with the expressed goal of reducing the cost of electricity to consumers.

Question. Does the EPA believe its policies and regulations regarding ozone, fine particulates, the Regional NO_X SIP Call, Section 126 petitions, New Source Review, coal combustion wastes, and electricity deregulation may be conflicting and dangerous to other important energy policy implications?

Answer. The rules EPA has already issued that regulate the utility industry are to address well-recognized and long-standing public health and air quality problems. The NO_X reductions that will be required by either section 126 or the NO_X SIP Call are necessary to bring areas into attainment with the pre-1997 1-hour ozone standard. Before issuing these rules, EPA carefully considered their impact on the cost and reliability of the electric power supply. EPA found that these NO_X reduction requirements will not have an adverse effect on electricity system reliability or on electric power costs for households or industrial users. EPA also found that these NO_X reduction requirements will not have a significant impact on the use of coal for electrical generation. As the electricity generating industry has recognized, over the next ten to fifteen years public health and environmental concerns are likely to require additional reductions of multiple pollutants from the electric generating industry.

EPA has considered the restructuring of the electric power industry in the context of our rulemakings and other Agency actions. EPA believes that this transitional period for the power industry is an appropriate time to address the environmental responsibility of electric generating facilities; in this way, the industry can be afforded the most coherent planning framework and the greatest flexibility and stability. The Administration believes that restructuring will have substantial benefits for consumers, including a significant reduction in the cost of electricity which is likely to exceed the costs of the environmental safeguards necessary to ensure that public health and the environmental are protected.

REGULATORY ACTIONS: IMPACT ON USE OF COAL

Question. Has the EPA done any analyses or commissioned any studies to determine the cumulative effect of all of these regulatory and agency actions on the use of coal and any unintended electric power cost increases from such actions? Does the EPA believe that the combination of these regulatory actions, unintended or not, will reduce the use of coal for electric generation in the foreseeable future?

Answer. EPA has not conducted an analysis of the cumulative effect of the specific list of policies and regulations listed in your previous question. EPA's analysis of changes that will occur in the electric power industry due to the NO_X SIP call and Section 126 shows very little reduction of coal-fired capacity. Instead, compliance with both regulations will be achieved primarily through the installation of emission control technologies such as selective catalytic reductions (SCR) and selective non-catalytic reduction (SNCR). The Agency estimates early closure by 2007 of, at most, 0.06 percent of the coal-fired capacity in the SIP call region. We also estimated an increase in combined-cycle capacity of between 1,798 and 4,156 MW. (See the Regulatory Impact Analysis for the NO_X SIP call, FIP, and Section 126 Petitions, Volume 1: Costs and Economic Impacts. EPA Office of Air Quality Planning and Standards, and EPA Office of Atmospheric Programs, September 1998). Further, the Agency's analysis indicates that there will be less than a one percent reduction in total coal demand in the U.S. in 2007 that will result from the NO_X SIP call. This translates to an anticipated annual reduction of approximately 4.6 million tons of coal production in the eastern U.S. (See Responses to Significant Comments on the Proposed Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group (OTAG) Region for Purposes of Reducing Regional Transport of Ozone, Docket No. A–96–56, U.S. EPA, September 1998).

EPA examined the potential increases that may occur in electricity prices under the NO_X SIP call and section 126. The Agency concluded that these increases will likely result in a 1.6 percent increase in the average electricity bill. (See the Regulatory Impact Analysis for the Final Section 126 Petitions Rule. EPA Office of Atmospheric Programs, December 1999).

Looking at potential future regulations, EPA released a report in March 1999 concerning its investigation of some options for emission controls and their impact to

the electric power industry and the fuels it uses. The report, titled "Analysis of Emissions Reduction Options for the Electric Power Industry," presents the results of multiple pollutant analyses conducted by EPA regarding the four most significant air pollutants from electric power generation: nitrogen oxides, sulfur dioxide, mercury, and carbon dioxide. The options presented in this report are hypothetical approaches to emission controls on the electric power industry for each pollutant and do not represent the EPA or Administration position on how any of these pollutants should be reduced in the future. The analysis shows that having advance knowledge of potential requirements for all four pollutants could lead the industry to follow significantly different compliance strategies at individual plants, compared with compliance choices made when the pollutants are addressed one-by-one. Further, the analysis shows that an integrated strategy would have more modest impacts on fuel patterns than many other analyses have predicted. In all options investigated, coal remains a major fuel in the production of electricity in this country. EPA continues to refine these multi-pollutant analyses.

SUBCOMMITTEE RECESS

Senator BOND. Thank you so much.

[Whereupon, at 11:14 a.m., Thursday, March 23, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT AND INDEPENDENT AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

THURSDAY, MARCH 30, 2000

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

The subcommittee met at 9:34 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Christopher S. Bond (chairman) presiding.

Present: Senators Bond, Kyl, Stevens, Mikulski, and Leahy.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

STATEMENT OF ANDREW CUOMO, SECRETARY

ACCOMPANIED BY:

SAUL RAMIREZ, DEPUTY SECRETARY
GAIL LASTER, GENERAL COUNSEL
JACQUIE LAWING, DEPUTY CHIEF OF STAFF FOR POLICY AND PROGRAMS
RHODA GLICKMAN, DEPUTY CHIEF OF STAFF
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JACKIE JOHNSON, DEPUTY ASSISTANT SECRETARY FOR NATIVE AMERICAN PROGRAMS
WILLIAM P. APGAR, ASSISTANT SECRETARY FOR HOUSING—FEDERAL HOUSING COMMISSIONER
IRA PEPPERCORN, DIRECTOR, OFFICE OF MULTIFAMILY HOUSING ASSISTANCE RESTRUCTURING
GEORGE ANDERSON, EXECUTIVE VICE PRESIDENT, GOVERNMENT NATIONAL MORTGAGE ASSOCIATION
EVA PLAZA, ASSISTANT SECRETARY FOR FAIR HOUSING AND EQUAL OPPORTUNITY
DAVID GIBBONS, ACTING CHIEF FINANCIAL OFFICER
EDWARD KRAUS, DIRECTOR, ENFORCEMENT CENTER
DONALD J. LaVOY, DIRECTOR, REAL ESTATE ASSESSMENT CENTER
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DAVID JACOBS, DIRECTOR, OFFICE OF LEAD HAZARD CONTROL

SUSAN GAFFNEY, INSPECTOR GENERAL

OPENING STATEMENT OF SENATOR CHRISTOPHER S. BOND

Senator BOND. Good morning. The Senate VA–HUD and Independent Agencies Subcommittee hearing will come to order. We welcome Secretary Cuomo and our other guests from the Department of Housing and Urban Development who have joined us here this morning to testify on the President's fiscal year 2001 budget request for the Department of Housing and Urban Development.

The President's budget request for HUD proposes $32.1 billion for fiscal year 2001, which is an increase of some $5.8 billion over the fiscal year 2000 appropriation of $26.2 billion. This includes a request for $120,000 new incremental vouchers at a cost of some $690 million as well as nine new housing initiatives costing another $200 million. While I have significant reservations regarding the creation of these new boutique programs, I am pleased the Administration has included additional funds for a number of HUD's core programs such as public housing, the CDBG program, the HOME program, and Section 202 elderly housing. In most cases these programs represent our most important Federal investment in affordable low-income housing and community development initiatives.

Mr. Secretary, I expect this will be the last time that we sit in a hearing to discuss the annual budget for the Department of Housing and Urban Development together. I know that you have worked hard to make the Department a better agency. However, I am disappointed the early promise of your energy and commitment has failed to make the necessary reforms to ensure the success of HUD's core housing and community development programs. I know many of these issues are not sexy and probably not especially interesting, but they are important to the people who live in housing and want to live there.

Now, a year ago you were touting the fact that HUD received its first clean audit as evidence that HUD has turned the corner. This was the first time ever that HUD received an unqualified opinion, and you got good press and were justifiably proud.

Unfortunately, this year the books have slid back into disarray, so much so that the auditors have been able to actually audit them, and that's the report that we have here. HUD's reaction? Attack the auditors, call them unprofessional, even though they are the same ones who gave you the clean audit last year. I think it is not time now, once again, to place the blame on others but, rather, admit that HUD's operations priorities or internal controls did not get the job done and need to be improved.

Let's be honest. It is HUD's books that needed $17.6 billion in adjustments to the fiscal year 1998 balances, and it is HUD's books that needed to make an additional $242 million in adjustments totalling $59.6 billion in the fiscal year 1999 balances.

I started my career in Government service as Missouri State Auditor, so I know a little about this, and Mr. Secretary, HUD has a huge problem on its hands, and you have on yours. In fact, if HUD were a private company, the SEC would probably have already suspended the trading in its stock.

Nevertheless, I am more concerned at this moment to be on balanced books. We need to have answers to the questions that are fundamental to the mission of the Department, namely, how is HUD performing its missions, do the programs work, if not, why not, and is HUD a good neighbor and partner?

One of the many frustrations people have with their Government is their gut feeling that no one is ever held accountable, no one is actually responsible for failures or bad ideas. Instead, the political culture comes out with phrases such as, mistakes were made, or else rewrites the nature of the problem.

In the case of HUD, the many programs it runs, and the millions of people it is supposed to serve, I have noticed an alarming pattern:

"Leadership quick to place responsibility or blame on others, but unwilling to understand or accept its own failings, and we have the extraordinary events of just this week, where you, Mr. Secretary, issued your fourth report in 4 years warning again about the crisis we are facing in affordable housing needs and, in discussing the report, you have been recorded as saying there was a 4-year hiatus when we went out of the housing business."

We are now paying for that hiatus, and moreover, from your statements you have identified the decision not to fund any new vouchers from fiscal year 1994 to 1998 is largely to blame for this accelerating housing crisis.

Based on this, what, of course, you are saying is that beginning in fiscal year 1994, with the House and Senate VA Appropriations Subcommittees under the leadership of Chairman Barbara Mikulski and Chairman Louis Stokes, their decision not to fund any new vouchers sowed the seeds for the crisis, and when Chairman Bond and Chairman Lewis continued the practice over the next few years, as we attempted to dig out of our budget quagmire, that we are responsible as well.

However, your own report states the problem is due to a shrinking number of affordable units, and as I have said over and over again, these vouchers you are so anxious for have not and will not produce one additional unit of affordable housing, but you have fixed the blame. It is Congress, Senator Mikulski and her leadership, Senator Bond and his leadership.

But we ask the question about HUD's leadership. Where is the discussion of what HUD has been doing over the past 4 years? Let's look at the record. Just between 1996 and 1998, according to the National Housing Trust, we lost over 925 properties through opt-outs, prepayments involving nearly 98,000 affordable apartments. The National Housing Trust further notes that these lost units have, quote, occurred in many prime housing markets, which unfortunately led to the loss of affordable housing from neighborhoods with better schools and services, close quotes.

In past years, we asked you to devote your attention to and solve the opt-out problem. Last year, this subcommittee became so frustrated with HUD's lack of leadership and action to preserve the units that we directed you through legislative provisions to preserve this housing, as well as provided $100 million in new funding to get HUD to act.

According to HUD's 2001 budget summary, the good news was, this legislation in 1999 cut the loss of section 8 housing by 75 percent, so maybe our work is beginning to pay off, but for 2 years the

Majority and Minority on this subcommittee tried to get HUD's attention, and the failure to act cost us at least 100,000 affordable, low-income housing units, and we think that HUD's record on section opt-outs was abysmal.

Second, let us review how HUD has handled the multifamily properties in the FHA portfolio. These could be HUD-held, or HUD-owned. In both cases, the expectation that most of us have is that when HUD steps in, that preserving the housing stock in the inventory would be a priority. Unfortunately, what we found is just the opposite.

HUD has lost a significant number of affordable rental housing units that could have addressed the worst-case housing needs that HUD often cites. In terms of properties that HUD owned, then sold, only 14 properties containing 1,538 units were maintained as section 8 housing, while 107 properties containing 17,877 units were sold during your tenure, and the units lost as affordable low-income housing.

When we looked at HUD-held properties that had been sold by HUD, only 10 properties containing 830 units were maintained as section 8 housing, while 72 properties containing 8,891 units were sold and the units lost from inventory as low-income housing. That is a retention rate of less than 10 percent.

By our overall calculation, Mr. Secretary, that means on your watch we have seen the affordable housing inventory decline by nearly 125,000 affordable, low-income housing units. That, to me, is a record of failure, one that is felt Nation-wide.

In the meantime, Congress, at your request, has provided funding over the last 2 years for 110,000 vouchers, vouchers which you say are an important step towards closing this affordable housing gap. You have stated it is critical for working families, because increased housing costs have left them less able to afford food, medical care, education, and other necessities.

But of those 110,000 working families who could have been helped these past few years, only 3,300 actually have been given a voucher. That is just about 3 percent. What is going on at HUD that these vouchers are still sitting around? How could HUD fail this badly, when people it is supposed to serve have needs?

Of the 125,000 units of affordable housing lost, over 100,000 vouchers sitting around unused, and yet your reports accuse this committee of causing the affordable housing crisis. We look forward to hearing your comments, Mr. Secretary, but first let me turn to my distinguished Ranking Member, Senator Mikulski for her comments. Senator Mikulski.

[The statement follows:]

PREPARED STATEMENT OF SENATOR CHRISTOPHER S. BOND

The Senate VA, HUD and Independent Agencies Appropriations Subcommittee will come to order. We welcome Secretary Cuomo and our other guests from the Department of Housing and Urban Development who have joined us here this morning to testify on the President's fiscal year 2001 Budget Request for the Department of Housing and Urban Development (HUD).

The President's Budget Request for HUD proposes $32.1 billion for fiscal year 2001 which is an increase of some $5.8 billion over the fiscal year 2000 appropriation of $26.2 billion. This includes a request for 120,000 new incremental vouchers at a cost of some $690 million as well as 9 new housing initiatives costing another $200 million. While I have significant reservations regarding the creation of these

new boutique programs, I am pleased that the Administration has included some additional funds for a number of HUD's core programs, such as public housing, the CDBG program, the HOME program and section 202 elderly housing program. In most cases, these programs represent our most important Federal investment in affordable low-income housing and community development initiatives.

Nevertheless, despite rosy scenarios and high expectations caused by a balanced budget, this will be another tough year for this subcommittee. We have made a commitment to reform social security first, and as always, this subcommittee has the responsibility for funding a variety of agencies with different missions and priorities. It is not easy to reconcile these missions and priorities and we again have significant funding increases that must be provided for in VA Medical Care as well as the need to address the escalating costs of section 8 contract renewals which have been aggravated by the Administration's and the Congress' decision to defer $4.2 billion of fiscal year 2000 section 8 funding to fiscal year 2001. This funding decision will have to be accommodated under our budget caps for fiscal year 2001.

Mr. Secretary, I expect that this will be the last time that we sit in a hearing to discuss the annual budget for the Department of Housing and Urban Development. I know that you have worked hard to make the Department a better agency, but I am disappointed that the early promise of your energy and commitment has failed to make the necessary reforms to ensure the success of HUD's core housing and community development programs. I know that many of these issues are not sexy and probably not especially interesting, but they are important.

Now a year ago, you were touting the fact that HUD received its first "clean audit" as evidence that HUD has turned the corner. This was the first time ever that HUD had received an unqualified opinion, and you got good press and were justifiably proud. Unfortunately, this year the books have slid back into disarray, so much so that the auditors have been unable to actually audit them.

HUD's reaction? Attack the auditors. Call them "unprofessional"—even though they are the same ones who gave you the "clean" audit last year. I think that it is time not to always place the blame on others but rather admit that HUD's operations, priorities or internal controls just didn't get the job done.

And let's be honest, it is HUD's books that needed $17.6 billion in "adjustments" to the fiscal year 1998 balances. And it is HUD's books that needed to make an additional 242 adjustments totaling $59.6 billion to the fiscal year 1999 balances.

I started my career in politics as Missouri's state auditor—so I know a little about all this—and Mr. Secretary, you have a huge problem on your hands. In fact, if you were a private company, the SEC would suspend trading of your stock.

Nevertheless, I am more concerned at this moment to look beyond balanced books. We need to have answers to the questions that are fundamental to the mission of the Department; namely, how is HUD performing its mission, do the programs work, if not, why not, and is HUD a good neighbor and partner.

First, HUD remains a high-risk area that is considered vulnerable to waste, fraud, abuse and mismanagement. It is the only agency designated as a high risk area by GAO on an agency-wide basis, and GAO, the HUD Inspector General and others continue to raise questions and concerns about HUD's capacity and ability to deliver on the promise of its programs. This is a key question and concern. As we have discussed in the past, as a matter of fiscal responsibility, HUD is one of the nation's largest financial institutions, with sizable commitments, obligations and exposure. HUD is responsible for managing more than $496 billion worth of insured mortgages, $628.4 billion in outstanding mortgage-backed securities, and some $106.9 billion in prior year unexpended budget authority for which it has future financial commitments.

Despite the magnitude of these responsibilities, HUD has never matched its staffing requirements with program needs. This has become especially critical as HUD has reduced its staffing from 12,000 staff in 1995 to some 9,100 staff today. In addition, many of the key program decisions within the Department have been transferred to Community Builders, who are not only contract employees but in many cases are without the necessary program expertise and knowledge to make appropriate program decisions and recommendations. While this program is being phased out, I worry about HUD's ability to develop the staff capacity and expertise needed to ensure the appropriate delivery of our housing and community development programs. In addition, HUD has an aging staff with top heavy salaries. So not only does HUD need to develop staff expertise and capacity, it needs to reinvigorate itself.

I also want to be very clear that I do not expect HUD to take shortcuts to solving these institutional and systemic problems. We need to establish a long-term staffing plan that is tied to program needs and requirements. We also need to establish an

information system that can track funding decisions and integrate information on all HUD programs; one that is accurate and dependable.

One of the frustrations many people have with their government is their gut feeling that no one is ever held accountable, no one is actually responsible for failures or bad ideas. Instead the political culture spews out phrases such as "mistakes were made" or else rewrites the nature of the problem.

In the case of HUD, the many programs it runs, and the millions of people it is supposed to serve, I have noticed an alarming pattern—leadership which is very quick to place responsibility or blame on others but absolutely unwilling to understand or accept its own failings. And thus we have the extraordinary events of just this week, where you, Mr. Secretary, issued your 4th report in 4 years warning again about the "crisis" we are facing in affordable housing needs, and in discussing this report you have been quoted as saying that "There was a 4 year hiatus when we went out of the housing business. We are now paying for that hiatus." And, moreover, from your statements you have identified the decision to not fund any new vouchers from fiscal years 1995 through 1998 as largely to blame for the accelerating this housing crisis.

Based on this, what of course you are saying is that beginning in fiscal year 1995, with the House and Senate VA/HUD Appropriations Subcommittees under the leadership of Chairwoman Barbara Mikulski and Chairman Louis Stokes, that their decision to not fund any new vouchers sowed the seeds for today's crisis. And that when Chairmen Bond and Lewis continued this practice for the next few years, as we attempted to dig out of our budget quagmire, that we are responsible as well.

Moreover, your own report states that the problem is "due to a shrinking number of affordable rental units". And as I have said over and over, these vouchers you are so anxious for—have not, and will not, produce one additional unit of affordable housing.

But you have fixed the blame. It is Congress. It is Senator Mikulski and her leadership. It is Senator Bond and his leadership. But you have not commented on your own leadership.

Where is the discussion of what HUD has being doing over the past 4 years?

Let's look at the record.

Just between 1996 and 1998, according to the National Housing Trust, we have lost over 925 properties through opt-outs and prepayments involving nearly 98,000 affordable apartments. The National Housing Trust further notes that these lost units have "occurred in many prime housing markets, which unfortunately led to the loss of affordable housing from neighborhoods with better schools and services." Last year, this Subcommittee became so frustrated with HUD's lack of leadership and action to preserve these units that we included a number of legislative provisions to preserve this housing as well as $100 million in new funding to get HUD to act.

According to HUD's fiscal year 2001 budget summary this "legislation in 1999 has cut the loss of Section 8 housing by 75 percent". So maybe our work is paying off now—but for two years democrats and republicans on this Subcommittee tried to get HUD's attention and this failure cost us at least 100,000 units.

Second, let's look at how HUD handles the multi-family properties in the FHA portfolio. These can be HUD-held, or HUD-owned. In both cases, the expectation that most of us have is that when HUD steps in, that preserving the housing stock in the inventory would be a priority. Unfortunately, what we found is just the opposite.

In the case of this HUD multifamily inventory, HUD has lost a significant number of affordable rental housing units that could have addressed the worst case housing needs that HUD often cites. In terms of properties that HUD owned then sold, only 14 properties containing 1,538 units were maintained as section 8 housing out of 121 properties containing 19,415 units that were sold during your tenure. In terms of HUD-held properties that have been sold by HUD, only 10 properties containing 830 units were maintained as section 8 housing out of 82 properties containing 9,721 units during this period.

This means, Mr. Secretary, on your watch, we have seen the affordable housing universe of HUD owned and HUD-held multifamily housing decline by over 125,000 units. That is simply put, a record of failure.

In the meantime, Congress has provided funding, per your insistence, for 110,000 vouchers over the past two years—vouchers which you say are "important step in towards closing this affordable housing gap". You say it is "critical for working families", because increased housing costs have left them less able to afford "food, medical care, education or other necessities".

But of those 110,000 working families who could have been helped these past few years—only 3300 have actually been given a voucher. That's only 3 percent. What

is going on at HUD that these vouchers are still sitting around? How could HUD fail this badly, the very people it is supposed to serve?

225,000 units of affordable housing lost, over 100,000 vouchers sitting around unused—and you have the gall to accuse Senator Mikulski and I of causing this so-called affordable housing "crisis".

In addition, while the FHA Mutual Mortgage Insurance Fund for the FHA Single family Mortgage program is presently in good shape, FHA's inventory of single family homes that HUD has foreclosed on and taken ownership of has more than doubled under your tenure from 24,395 homes in 1996 to over 47,000 homes currently, despite the fact that this subcommittee has provided significant new tools to move this housing into the hands of nonprofits and homeowners. Even more troubling is the fact that from between April 1999 and January 31, 2000, the percentage of properties in HUD's single family inventory for 6 months or more has increased from 30 percent to 41 percent of the inventory, and the percentage of properties in the inventory for more than 12 months has increased from 10 percent to 17 percent. This is a disaster for neighborhoods and sloughing off these properties on local governments is not a responsible answer.

And the bad news is not over, The percent of FHA loans in foreclosure has increased from 1.64 percent in 1996 to 2.2 percent in 1999. FHA's loan delinquencies has also increased from 8.05 percent in 1996 to 8.57 percent in 1999, whereas the delinquency rate for conventional loans is some 2.63 percent. Even more disturbing is KPMG's recent audit finding regarding FHA loans that HUD currently holds as the mortgagee. KPMG found that FHA could have prevented further losses to the fund if it was able to service its loans adequately. Specifically, over 2,500 loans, or 22 percent of the portfolio were not being actively serviced as of September 30, 1999. Lastly, KPMG found that the quality of the portfolio had deteriorated significantly between 1996 and 1999.

Again, when the federal government steps in to take over a property from a failing landlord, or becomes the owner of a house down the street through foreclosure, we expect that things will start to improve; that repairs will be made, lawns mowed, and broken windows fixed. What we don't expect is that the housing conditions will deteriorate even further, that property values will fall in the neighborhood, and that in some instances the property will become a HUD-owned crack house.

What is HUD doing? And if it is true that HUD is running a huge surplus in the FHA fund . . the fund that is used to maintain and preserve HUD-owned properties . . while all these units are being lost, it is a fair question to ask what is HUD thinking?

We look forward to hearing your comments, Mr. Secretary. But first, let me turn to my distinguished Ranking Member, Senator Mikulski.

STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. Thank you very much, Mr. Chairman, and I also want to thank you for allowing the VA–HUD Committee to hold a very important field hearing in Baltimore on Monday on the issues related to the flipping of property, where property is bought at one price and then the poor are sold the housing at an inflated price, with false information about the buyer's credit, false information and deceitful and criminal information by the appraiser, and so on, and we will talk more about it, but we had an excellent hearing, and I want to thank you for authorizing the hearing and for the participation of your staff.

We were joined at that hearing by Senator Sarbanes so that he, too, could get insights for corrective action through the authorizing.

Mr. Cuomo, we want to welcome you today for today's hearing, and I know this will be your last appearance before the committee on the matter of the appropriation. Based on some of the things that we've uncovered and discussed with you, there might be additional, either a hearing or a roundtable or something.

In our work together I know that you have focused very much on the issues that I raised from time to time in hearings, on the issues of the consequences of HOPE VI and section 8, are we changing vertical poverty to horizontal poverty, your concern about

the digital divide, your taking on the challenge that I raised about the need to look at housing for the elderly, and look at the contemporary demands of people aging in place, and what we need.

Ordinarily, those are things that I would go through in detail at the hearing, because the appropriations put forth on housing for the elderly are a significant increase, and a focus on new groundbreaking initiatives and assisted living, and I would hope perhaps to have additional conversations with you and your staff on that.

In terms of HOPE VI, I believe it has been one of the most successful antipoverty programs we have had. We have not only created a new physical infrastructure but a new social infrastructure, and I know that you are looking at ways to improve the program, and under the leadership of Ms. Elinor Bacon, who is in charge of HOPE VI, it was how we could keep the momentum going, improve the program, and also make sure we are not creating horizontal poverty, and we look forward to further conversation on that.

Within the Senate itself, I have taken on the responsibility within the Democratic Caucus to come up with initiatives to ensure that there is no digital divide in this country. Through extensive conversations with the President, the Vice President, and his team, we really do have a legislative framework, and one we would like to build on lessons learned by bringing computer technology into HOPE VI, which meant job-training for adults, after-school activities for children, and again, those are areas for further conversation.

But today, I really want to focus on the hearing that I had in Baltimore and some of the issues raised prior to the hearing, but the hearing confirmed my worst fears.

Mr. Secretary, you know my background. You know that I came into politics to save lives, to save communities, and to save neighborhoods.

When I met with the community in Baltimore several weeks ago, with the advocates of a group called Coalition Against Predatory Practices, Predatory Real Estate Practices, I was horrified to see where the very tools of the Federal Government, used to promote home ownership, had become the very tools for scamming the poor, actually gouging the poor, and that in that process of gouging the poor, forcing them into bankruptcy then meant foreclosures, and that very often the very HUD inventory itself, of holding FHA mortgages, were destroying neighborhoods.

So in both my meetings with the coalition, and then in our hearing, what we found was that HUD itself was a contributor to the destruction of dreams, the erosion of neighborhoods—I will wait until you finish reading Mr. Apgar's note.

Mr. CUOMO. Sorry.

Senator MIKULSKI. Mr. Apgar, I think you need to hear this. I really think you need to hear this, because FHA is only one part of what happened in flipping, but it is the one, perhaps, that we have the most control over because of the sub-prime underissue. I know that HUD did not directly do this, but HUD has to know the consequences. HUD has to—perhaps Mr. Apgar—has to get out of headquarters and go out and take the same tour that I did to see that.

Now, what we see here is that people are buying and reselling property for a 100-percent profit, sometimes within the same day. Property-flipping is directly related to the problem of predatory lending, scamming them, destroying their lives, and ruining entire communities. These communities were part of my original city council district. They were part of my congressional district, and they are part of both my neighborhood, and they are the home, they are literally my home, and they are the home of my heart, so I am going to fight for those neighborhoods.

But those neighborhoods are a metaphor, because if I thought it was only going on in Baltimore, it would be like the Superfund site that we would move in to contain. But it is more like a virus, and it is spreading nationwide, in Milwaukee, in Chicago, in Buffalo, in my own State, tell-tale signs already in Prince Georges County, so it is more like a virus that is spreading, and I think we need to jump in and do something about it, to do something about the gouging of the poor, home improvements scams, crooked appraisers, kick-back to mortgage brokers, and then holding the destabilization of neighborhoods.

I know that you and I talked about this, and I know that you have some very important thoughts and recommendations on this. I personally want to thank you for taking very constructively the results of that hearing and actually meeting with the neighborhood people themselves, to leap-frog over our staffs, bureaucracies, and going on, and going directly to the people.

On behalf of them, I really want to thank you. They are in the audience here today, and we will acknowledge them later on in the testimony, but I want to thank you for going directly to them to get a sense of the problem, and so today I look forward to the solutions about not only what we could do about Baltimore, but using Baltimore as the laboratory, because the FBI said to me that this was the worst case situation in the Nation, and of the 5,000 homes that were sold in Baltimore, 10,000 homes last year, 5,000 are now into default.

Now, 50 percent are into FHA default. Something is wrong somewhere. Not all are a result of flipping, so I am going to stop the crime. I am going to stop the scum from gouging the poor in our communities nationwide, and I want to make sure that when FHA takes hold of property, we deal with it in a way that enhances and builds the neighborhoods. I know that is your commitment. Let us work together, and I look forward to hearing your testimony.

Senator BOND. Thank you, Senator Mikulski.

Senator Leahy.

STATEMENT OF SENATOR PATRICK J. LEAHY

Senator LEAHY. Thank you, Mr. Chairman, and Secretary, everybody has told you all that may go wrong. Let me say that there is a lot of things have gone right, and I think a lot of it reflects the hard work you have shown over the last 3 years at HUD.

I recall when you were appointed as Secretary I told you I did not know whether to congratulate you or offer you condolences, because it is a very difficult area. You are never going to have enough money to do all the things you want to do, and the things you want to do can almost never be done perfectly, because if there could be

there would not even be a need for HUD to be there. Usually you are facing some of the most intractable problems.

You took over the most overburdened Department in our Government, but at the same time you have reduced the size of HUD's bureaucracy. The head of the GAO has publicly stated you have made incredible progress toward implementing a plan to remove your Department from the high-risk designation. You have improved the HUD budget to better address the housing needs across the country.

I think you have prepared a strong budget for fiscal year 2001. I congratulate you for that. The recent release of HUD's worst-case needs report illustrates how important it is to remain committed to the housing needs of low-income families, and the irony is we are in a time of high economic prosperity, the best in my lifetime, in this country but we still have some real housing needs among low-income people.

You propose 120,000 new housing vouchers and $1.2 billion in homeless assistance grants. I think they need it. They will begin to address the real problem of those who are least able to afford a place to live.

I am also encouraged by your commitment to the CDBG and HOME programs. These have been two of the most effective programs available for financing housing and economic development. They have also—I know they have been helpful in rural areas like my own State of Vermont, but also in other parts of the country, and to risk sounding parochial, something that rarely ever happens in the Appropriations Committee and almost never here, I did look at a study recently conducted in Vermont.

Now, to put this in perspective, Vermont has about 600,000 people. It shows on top of the 15,000 families already helped by State and Federal programs, nearly 22,000 families still need some sort of housing assistance. And 22,000 families is not much in California or New York, or Illinois. It is an awful lot of people in Vermont, and we have got one of the most expensive and tightest housing markets certainly I have seen in my lifetime.

In Chittenden County, one of our 14 counties, but one that has about a quarter of our State's population, and Mr. Secretary, you have visited that area, and you know many of the people there, the residents are currently facing a 1-percent vacancy rate, a 1 percent, and housing costs are expensive. The middle income families are being left homeless. They can go to a hotel. They can go—or just not have homes. And that is happening in other parts of the country. I am not suggesting that we are unique. Unfortunately it is happening in a lot of other parts.

Now, let me mention New York City and the homeless program. I am convinced from all I have read, all I have seen, all my staff's been able to see, that HUD acted in the best interest of the homeless in New York City. I want to make that very clear.

Legitimate concerns about reduction in grant proposals by city officials were identified by a Federal district judge in Manhattan, and suggested it was done out of a sense of vindictiveness. I think you were correct to take that program away from the city until it could be determined that homeless funds were being reviewed on

their merits, not according to some kind of litmus test set up in the mayor's office.

You know the funds that are awarded through the continuum of care program are only as effective as the organization that administers them. You can put the money in there, but it has got to be administered well, and it has been the homeless community in New York City which has been the victim throughout this process, and I understand you are working with that community and working with city officials.

I would hope that we can get politics out of it once and for all, and I do not particularly care which party is controlling HUD, or which party is controlling the city hall for the purposes of getting this money out there. It should be done where it is going to do the best. We know what we want to do. We want to help the homeless, and they were not being helped because too many litmus tests were being put for whatever reason, but not for reasons that were intended by the Congress or by your Department, so you were right to take it over.

So I thank you for that, and I will have some questions when we start, but I would also like to say again I enjoy working both with the chair and the ranking Member of this committee. I do not know two Senators who work harder on their budget, go through more frustration, but have more hopes for the future than the two of you.

Thank you. Thank you, Mr. Chairman.

Senator BOND. Thank you very much, Senator Mikulski, and Senator Leahy, we thank you for your faithful attendance on the appropriations subcommittees. With so many hearings we have, it is difficult to get appropriations members of the committee to join us, and you have been a faithful participant. We appreciate that.

Now, Mr. Secretary, we would welcome your opening statement. As always, we will make your full statement, the budget request and all the information already submitted a part of the record and ask you to summarize what you think would be the most important parts of the information you have today.

STATEMENT OF ANDREW CUOMO

Mr. CUOMO. Thank you very much, Mr. Chairman, for the opportunity to be here again, and thank you, Senator Mikulski and Senator Leahy, not just for your attendance at this hearing, but for all your good work and help over this past year.

If I might, with the committee's permission, quickly introduce the senior officials who are here today, who may be responsive to your questions. At the table seated with me, to my right, as you know, is FHA Commissioner William Apgar. To my left is Deputy Secretary Saul Ramirez. I will ask these people to stand quickly. It will also be good exercise.

Assistant Secretary Cardell Cooper, CPD, Assistant Secretary Harold Lucas, Public Housing, Mr. George Anderson, Acting President of GNMA, Assistant Secretary Susan Wachter, Policy Development and Research, Assistant Secretary Eva Plaza, Fair Housing, Gail Laster, General Counsel of the Department, Stephen Carberry, Chief Procurement Officer, Joe Smith, Acting Assistant Secretary for Administration, Mr. Donald Lavoy, who runs the REAC, Real Estate Assessment Center, Mr. Ed Kraus, who is a

detailee from the FBI and runs the Enforcement Center, Mr. Hal DeCell, Assistant Secretary for Intergovernmental Relations, Jackie Lawing, Acting Chief of Staff, Dave Gibbons, Acting CFO, Douglas Kantor, Deborah Vincent, Deputy Chiefs of Staff, Rhoda Glickman, Deputy Chief of Staff, Mr. Fred Karnas, who is in charge of the Homeless programs, Deputy Assistant Secretary, Jackie Johnson, who is in charge of the Native American Programs, and last but certainly not least, Ms. Elinor Bacon, who is in charge of the HOPE VI program, which, as Senator Mikulski rightly pointed out, has been a real success story.

Senator BOND. Mr. Secretary, we welcome all the members. Let me ask all the other representatives of HUD who were not introduced, would you stand up as well, please, so everybody else who works for HUD, if you would please stand up.

All right. Well, thank you very much. We feel somewhat overmanned. You have more than the combined staff of the entire Appropriations Committee here, and we are certainly glad, and welcome all of them to participate in the discussions.

HUD'S ACCOMPLISHMENTS

Mr. CUOMO. Thank you very much, Mr. Chairman.

First let me also thank the committee, as this will be probably the last time that I am before you. We have accomplished great things in this past 4 years, past 3 years, and I believe when they write the history book of housing, outside of this political year, these 4 years will be a period of great progress.

We have new section 8 vouchers over this period of time, not what the President requested, but at least we are back into business. We do have public housing legislation, which has reformed public housing, the first legislation that has been passed in 7 years. It has made a real difference, deconcentrated poverty.

We have addressed the section 8 issues. Mr. Chairman, I recall, I believe in this room at my confirmation hearing, with then Senator D'Amato, we put two charts on an easel to my left talking about the impending crisis of section 8 and how that had to be the focus because we were going to be losing units. Literally before I was in office, we identified that as the major problem, and I am glad that we have been able to respond to that.

We increased the FHA loan limits. We have made significant management progress at the Department, and every non-political credible source will confirm that management progress, starting with the GAO, which is often referred to by Congress, but also a raft of expert private consultants such as Price Waterhouse, Booz Allen, Arthur Andersen, et cetera, and we more than doubled the homeless assistance budget, and we changed the way of doing business there and I think in many ways we are doing much more service for those people who need it most, who make up the homeless population.

So I think those are just some of the highlights of what we have accomplished. Not that our job is done, certainly. We have not reached management Nirvana at HUD. We have further to go. We have not addressed the housing problem. It is getting worse in the midst, but we have made progress, and we have another good year ahead of us.

PREDATORY LENDING

Part of our responsibility is to address the changes that occur, the challenges that arise on our watch. I think Senator Mikulski has put her finger on probably the challenge to housing and communities that face the Nation for the next few years, and that is the issue of predatory lending.

The Senator has identified it in the City of Baltimore, where it is a significant problem, but it is also a national crisis, in my opinion, and it is going to be a priority for us at HUD over this coming year. It is just evolving on us, and we do not really see the full parameters of it yet, but what has happened is, the sub-prime mortgage market has actually exploded in growth.

If you look at the numbers just from 1993, the quote-unquote sub-prime market went from about 100,000 loans to about 900,000 loans, the value of the sub-prime portfolio from $20 billion to $150 billion, so this has been a market——

Senator MIKULSKI. Can you move that? The person doing the transcript sees it better than we do.

Mr. CUOMO. This has been an explosion in sub-prime lending. Now, sub-prime lending in and of itself is not bad. It is good, bringing credit to people who need it, but it has opened the door for abuse of a very vulnerable population. That is what has been now recently termed predatory lending.

National Consumer Law Center estimates 600,000 Americans may lose their homes because they were duped into bad loans. Now, the predatory lending comes in all types of forms. Basically, the forms are excessive up-front fees and high interest rates, up-front financing cost of credit life insurance, excessive prepayment penalties that trap homeowners in high-cost mortgages, and balloon loans that are structured to include an extremely high final payment.

This issue is bigger, frankly, than HUD. It is certainly bigger than the FHA. Alan Greenspan said that he is, quote, concerned over the unfair and deceptive lending practices in the mortgage industry that target the poor and underserved communities.

Mayor Richard Daley sees this in Chicago and says that predatory lenders are a new menace to our neighborhoods. These people do not wear gang colors and flash hand signals. They wear pinstripe suits, and they flash easy cash. But I think there is much of the echo, Senator Mikulski, in your sentiments in that quote.

We believe it is the obligation of HUD to rise to this challenge. HUD is the housing organization for the Nation. HUD is responsible for RESPA, the Real Estate Settlement Procedures Act, which is applicable here, and this is primarily a housing problem.

The methodology that we would employ to address this issue over these next few months is as follows. First, rather than dealing with the problem in the abstract, or as a concept, we would deal with the issue as a practical, as it is presented in practice.

The City of Baltimore for a number of factors probably presents, in our opinion, one of the worst manifestations of all of these phenomena. There is a confluence of circumstances in the city that conspire to make this problem of, quote-unquote, predatory lending even worse.

We would use the City of Baltimore as what we call an operational laboratory. Let us address these issues as they are presented in the city, use the experience then to arm a national task force which could have hearings Nationwide to make sure what we are seeing in Baltimore is also what we are seeing in Chicago, also what we are seeing in Denver, also what we are seeing in Los Angeles, and then come up with a report to the Congress.

We would hope to do this in 8 weeks, so that Congress could consider legislative changes this year, because we think time is of the essence, and that is our plan going forward. We'd like to establish a national task force, also a Baltimore task force that focuses specifically on Baltimore, designing practical solutions and a national policy.

While Baltimore faces challenges, there are also significant opportunities in Baltimore. It has one of the strongest networks of CDC's, Community Development Corporations, in the Nation in our opinion, very organized, grassroots groups who are energized but also sophisticated in what they do, and we think that is a significant asset for us to build on.

So that is our proposal. We hope to get this done in 8 weeks, get a report back to Congress, as well as making the practical changes, and hopefully that can amount to legislative changes for the Nation, because in the final analysis we will need new laws for this new problem.

FHA has already done its part, and will do more. We have started to crack down on lenders who are making bad loans with what we call our credit watch program, but basically what this does is, it terminates lenders with excessive default or claim rates. If you are a lender, and you have an excessive claim rate, you are automatically terminated based on the default rate.

We are changing the appraisal process, because the appraisal process is very much an element in all of these schemes, and we are actually upgrading the appraisal process to what we call the homebuyer protection plan, which tested our appraisers for the first time, and makes the appraisal a submission to FHA and, hence, a submission to a Federal agency, and hence, a false appraisal a potential violation of the False Claims Act.

PROPERTY DISPOSITION

We are also working at FHA on expediting the disposition of our property. We are selling faster than we have ever sold before. You see the numbers coming down from 323 days to 144 days, and our most critical problem, which is what we call the aged inventory, our old properties, we have come up with what is in our opinion some very creative ways to sell them, 50 percent off for a police officer, the officer-next-door program—50 percent off for a teacher, to bring a teacher into a revitalized community, and a discount for qualified not-for-profits.

We have also gone the next step, which I believe is the final solution, if you will, for the aged inventory. If we do not sell a home after 6 months on the market, we give it to the city for $1, period, and the city will then transfer it to a not-for-profit, et cetera. We will do all of these things to try to sell the property faster, but we will put—your point, Mr. Chairman, about performance—an end

point. If none of this works within 6 months, rather than have an FHA property that might deteriorate, we will give it to the city, period.

We announced this just a few days ago with Congressman Kasich, who is concerned about this issue, and I am very excited about that.

The last point on FHA is, so we do not lose the forest for the trees with FHA—FHA is having a banner year.

Senator BOND. Mr. Secretary, in a kinder, gentler Congress, somebody has killed the red light off. It should have gone off several minutes ago, but I would like you to wrap up as quickly as you conveniently can with hitting the main points you wish to hit.

BUDGET REQUEST HIGHLIGHTS

Mr. CUOMO. Fine, let me just wrap up in a couple of minutes, then, with the chairman's permission.

FHA has come a long way since we started. When we took over it was a negative $2.7 billion. Now it is now $16.6 billion. That is where we have identified $5 billion to do more affordable housing, which we desperately need, and then we have, Mr. Chairman, the overall budget proposal by the President, which is the best budget for HUD in 20 years. As you pointed out, it goes up $6 million from $26 million to $32 million. We think we need that increase.

Affordable housing, which as the chairman pointed out is at an all-time high, 5.4 million families need affordable housing. We would suggest new vouchers once again, which we have proposed in the past. We are not a total solution, but they are a big step towards the solution. We propose 120,000 vouchers, which would double last year's number, but start to make a dent in the backlog of housing needs in the Nation.

We would also fully fund public housing, increase the HOPE VI program, which is a real success story, by $50 million. The HOPE VI program, following Senator Mikulski's vision of making HOPE VI not just a different community, a better community, but also a community of opportunity and lift, and bringing in e-villages and closing the digital divide, that has been a tremendous success.

We would also propose a new housing production program, because as the chairman has pointed out, vouchers alone do not make a housing program, and we also need a production program, especially in those areas where vouchers are not working.

We need more senior citizen housing. We propose another 7,500 units of mixed income, and flexible use of the FHA insurance.

Within the budget, we would also focus on the economic revitalization. The President has made a priority out of the quote-unquote, new markets, economic development in areas left behind. We have an APIC program, $37 million, which would leverage $1.5 billion from Wall Street, more empowerment zones and the raise in CDBG, the fair housing, we are looking for 14 percent more in fair housing money, because we still get those complaints daily of racial discrimination, and racism is very much alive and well and, finally, the safe and livable communities, where we are trying to come up with sustainable metropolitan-based solutions that bring the city together with the county in planning and action plans rather than dividing, and that is a very important piece as we go forward.

As the chairman pointed out, the affordable housing crisis has gotten worse. The vouchers have made a dent. I believe if we get a production program and we come up to scale and we use this surplus wisely, we can build on what is already a strong record, and I thank the committee for having us today.

[The statement follows:]

PREPARED STATEMENT OF ANDREW CUOMO

Chairman Bond, Senator Mikulski, members of the Subcommittee, thank you for inviting me here today to discuss HUD's proposed fiscal year 2001 budget. It is my pleasure to be here today. This year, HUD's budget request is $32.1 billion. That represents a $6 billion increase over the amount enacted last year. It's HUD's strongest budget in twenty years.

Mr. Chairman, before discussing the details of this year's budget, I would like to take a moment to thank you and this Committee for the extraordinary support that you gave us on our budget request last year, and for that matter, the year before. We have been able to accomplish great things together.

While we have not always agreed on all of the specifics, by working together we have been able to establish a remarkable record of bipartisan cooperation. For the past two years in a row we have reached unprecedented agreement on HUD's budget requests, with increased funding for public housing, economic development, homeownership, and rental housing. I look forward to another year of cooperation, and I pledge every member of my Department's commitment to that end.

Mr. Chairman, I believe that this year we are at a crossroads. This year, the first year of the new millennium, we must, make a choice. That choice is whether we build on our success and take a bold step towards once and for all addressing our nation's affordable housing needs. This year we have an extraordinary opportunity to set this nation on a new course, so that when the historians write the history of housing in this century, they will be able to say that this was truly the year we made good on the goal of a "decent, safe and affordable home for every American family".

And there should be no doubt that we are facing a crisis. It is a term that I do not use lightly. The evidence, unfortunately, is clear. It is impossible to open the newspaper today without reading reports describing the problem in communities in virtually every part of the country. Almost every day there are articles about rising rents and the lack of affordable housing—both in big cities like San Francisco, Los Angeles, Dallas, Miami and New York, as well as in smaller and medium-sized like Rochester, Norfolk, and Sacramento.

It is a cruel irony that while most communities ale doing very well in this booming economy, the better they are doing the more acute their shortage of affordable housing. Those that are doing the best are often also facing the worst shortages. The stronger the economy, the stronger the upward pressure on rents. Even some of America's strongest regions for business are literally being "priced out" of housing by their success. In Silicon Valley, the leading companies driving the global information age have identified affordable housing as their number one backyard concern.

HUD's new worst case housing needs report, which we released earlier this week, gives us a nation-wide picture that confirms these local reports. With your permission I would like to enter this report into the record. It is entitled Rental Housing Assistance—The Worsening Crisis. It's the most in-depth, comprehensive and respected analysis of rental housing in the United States.

There are a number of dramatic findings in this report. I would like to highlight three of them today. The first, and most important, is that, despite the booming economy, the number of families with worst case housing needs has increased to 5.4 million—an all-time high. Since the last worst case housing heeds report was released two years ago, the number of families with worst case needs has increased by 4 percent, twice the rate of growth for the U.S. population.

Households with worst case needs are defined as unassisted renters with incomes below 50 percent of the local median, who pay more than half of their income for rent or live in severely substandard housing.

Even more compelling than the record number of worst case needs is the increase that we've seen over the past decade. There are now 600,000 more households with worst case housing needs than there were in 1991 when the current economic recovery began—a rate of increase that is almost twice as fast as overall household growth.

A second important finding of this report is that families with worst case needs are working harder than ever. While you would expect that the poorest families also

have the worst case needs, the fact is that the number of people who work full-time and have worst case housing needs increased by 28 percent from 1991 to 1997—a rate of growth that is almost twice as fast as the rate for all other low-income renters. People used to think that if you were willing to work hard, things would take care of themselves. You would be able to afford housing and take care of your family. But that, unfortunately, is not always the case any more.

The third finding I want to highlight is that low-income Americans who live in the suburbs, not the cities, are more likely to have worst case needs than elsewhere. It disproves the myth that the affordable housing shortage in this country is an urban problem. It's the suburbs where you're seeing the largest drop-off in the number of affordable housing units available. In fact, over one third of all worst case households live in the suburbs.

These findings make a clear and compelling case for greater federal attention to our nation's housing needs. With this Committee's support and through bipartisan cooperation, we have broken the gridlock and affordable housing, when Congress approved new housing vouchers in each of the past two years—60,000 last year and 50,000 the year before.

With worst case needs at record levels, there is now an urgent need to strengthen federal efforts to assure adequate supplies of decent, safe and affordable housing for America's struggling families.

That is the need that our fiscal year 2001 budget proposals address, Mr. Chairman. That is why we have requested continued support from Congress for incremental housing vouchers to help meet the housing needs of low-income families struggling with rising rents.

And that is why the President has asked for an overall $6 billion increase over last year's enacted level. It reflects his belief that we must squarely address this rental housing crisis, that we must address the needs of those people and places left behind in this new economy, that we must help working families move closer to job opportunities—and that HUD now has the strength to address these challenges effectively and responsibly.

FISCAL YEAR 2001 BUDGET BUILDS ON SUCCESS

A few years ago, some would have argued that while the need was there, HUD did not have the capacity to address it. I am pleased to tell you that that is no longer the case. By virtually any measure, and according to every independent expert, HUD today not only has the capacity, but is better positioned than ever to help communities take on the challenges of the 21st century.

This year's budget proposal is a direct outcome of the management reforms we have put in place over the past three years. I am convinced that we now have the tools, the resources, and the capacity to wisely and responsibly spend the funds we have requested.

Our management reforms have succeeded in transforming HUD into an agency that puts communities first. Fighting fraud, waste, and abuse, our Public Trust Officers are cracking down on those who misuse taxpayer dollars. Renewing our commitment to first-class customer service, our Community Builders are connecting people to the full range of HUD resources. As a result, HUD today is back in business—back in the housing business, in the economic development business, and in the community empowerment business.

But nowhere is HUD's turnaround more evident than in the FHA's mortgage insurance programs. In 1990 FHA was virtually broke—$2.7 billion in the red. Despite a six-decade history of providing access to mortgage capital, FHA had projected losses from claims on mortgage insurance that were far in excess of projected revenue. Thanks to our Management 2020 reforms, that's all changed.

Today, the FHA and its Mutual Mortgage Insurance Fund are the healthiest they have been in decades. Last year FHA insured a record 1.3 million mortgages worth $124 billion. With FHA's help, the nation is currently enjoying the highest homeownership rate in history.

And last month, the new Actuarial Review of the FHA Insurance Fund for fiscal year 1999 brought more good news. The review—conducted by Deloitte Touche—shows the value of the Fund stands at a record high of $16.637 billion. According to the auditors, the value of the Fund is $5.3 billion over previous estimates. The President has directed me to work with the Office of Management and Budget to develop recommendations on how these surplus funds can best be used to strengthen federal housing efforts in the years ahead.

This past year has been a banner year for HUD in other areas as well. President Clinton kicked off his New Markets Initiative with historic visits to the Pine Ridge Indian Reservation, East St. Louis, Los Angeles, the Mississippi Delta, Central Ap-

palachia, and other inner-city and rural communities served by HUD. These are the emerging markets of the new century. They are the places that will provide the consumer and labor markets needed to fuel economic growth in the future—and through our economic development programs we will help them tap this potential.

The budget also proposes to expand the successful Continuum of Care program for homeless assistance and prevention—a winner this year of the prestigious Innovations in Government Award from Harvard University and the Ford Foundation. The national survey of homelessness in America, conducted by the Census Bureau, showed that we are on the right track with the Continuum—which has, so far, helped 400,000 people move from homelessness to self-sufficiency. But with an estimated 600,000 Americans still homeless each night, there is still much more to do.

In the past year we launched a major commitment to address one of the key challenges facing us in the new millennium—the graying of America. Our budget requests increased funding for HUD's new Housing Security Plan for Older Americans—helping seniors stay in their own homes as long as possible, increasing funding for the successful Section 202 elderly housing program, converting existing elderly housing to assisted living, and in 2001, building new assisted living facilities.

We have seen historic, across-the-board gains on the homeownership front—70.1 million American families own their homes today, more than at any time in our history. With higher loan limits and through internal reforms, a revitalized FHA is now on the leading edge of this homeownership boom, serving minorities, first-time home buyers, and cities in unprecedented numbers. This year's budget request positions the FHA to do even more. And we are also investing more than ever in our Native American programs to boost homeownership in Indian Country.

This year we are also proposing to tap the vital skills and resources—and the commitment to social justice—of the non-profit and faith-based community. Through our Center for Nonprofit and Interfaith Partnerships, a $20-million initiative will expand access of community and interfaith partnerships to HUD programs and help build new public-private partnerships at the local level.

Finally, we are more committed than ever to building safe, secure communities. The dramatic reduction in violent crime has been one of the great success stories of this past decade. Our budget contains several initiatives to further reduce the scourge of gun and other types of violence, both in public housing and in surrounding communities. Without safety there can be no prosperity.

Overall, this new budget affirms this Department's progress. HUD, clearly, is back in business. These initiatives will allow America's communities to make the most of this unique moment in our nation's history. Together, they will put this record prosperity to work for everyone, everywhere.

HUD's fiscal year 2001 budget addresses four major challenges: (1) economic revitalization of our nation's communities by investing in new markets; (2) increasing affordable housing and boosting homeownership; (3) ending discrimination in housing through enforcement of our Fair Housing laws; and (4) creating safe and livable communities.

ECONOMIC REVITALIZATION AND INVESTING NEW MARKETS

As we enter the 109th month of sustained economic growth—the longest our nation has ever known—we have much to celebrate: the lowest peacetime unemployment and inflation rates in decades; the fastest and longest real wage growth in 20 years; and an all-time high homeownership rate, which reflects both economic strength and consumer confidence.

But there is another side to this success. Though most cities are doing well, one in six still has unacceptably high levels of unemployment; in older suburbs, crime, poverty, and homelessness have become more prevalent; and in some parts of rural America, areas persist that are virtually untouched by the economic boom.

In his State of the Union message earlier this year, the President addressed these people and places when he said: "To keep our historic expansion going, we need a 21st century revolution to open new markets, start new business and hire new workers right here in America—our inner cities, poor rural areas, and on Indian reservations."

With this fiscal year 2001 budget, HUD is on the front lines of this 21st century revolution, building on HUD's successful track record of promoting business investment and job creation in underserved communities. Over the past seven years, we have retooled our job creation and business investment programs, creating hundreds of thousands of jobs in both urban and rural communities across the United States.

HUD's economic development initiatives will not only help spur the economic revitalization of distressed communities, they will contribute to the continued economic

growth of the nation as a whole. The goal of these initiatives is straightforward: extend the national prosperity to people and places left behind in the new economy.

CDBG.—Last year we celebrated the 25th anniversary of the Community Development Block Program. A pioneer of devolution, CDBG has developed a proven record as the most flexible federal aid to both cities and smaller rural communities. This year's budget request builds on 25 years of success, with a request for $4.9 billion, up $119 million over last year, and $195 million over the past three years. However, the real increase for this program is even larger than these totals imply. By reducing set-asides, we will increase the effective amount of formula funding that that goes directly to communities by $250 million, for uses they themselves designate.

American Private Investment Companies.—Last year, Congress appropriated $20 million as an initial credit subsidy for the cornerstone of the President's New Markets Initiative: for-profit investment funds known as America's Private Investment Companies (APIC). APIC will make sorely-needed private capital available to larger businesses that are expanding, relocating, or joint venturing in low- and moderate-income areas, both urban and rural. We have submitted authorizing legislation for this initiative, which must be authorized by June 30, 2000.

As we did last year, HUD is requesting $37 million to fully fund APIC. These funds will subsidize and secure $1 billion in privately issued, federally-guaranteed loans, which will leverage another $500 million in private equity commitments, for a total of $1.5 billion in new private sector funds that will create an estimated 200,000 jobs.

EDI and Section 108 Guaranteed Loans.—The Community Empowerment Fund streamlines two existing HUD programs that are important tools for local communities to create jobs and attract business investment: our Economic Development Initiative (EDI) grants and Section 108 guaranteed loans. Overall, our budget seeks $1.2 billion in loan guarantee authority under Section 108 of the Housing and Community Development Act.

This year, HUD is requesting $100 million in EDI grant funds. The $100 million in EDI grants will leverage an estimated $500 million in Section 108 guaranteed loans, and create an estimated 73,000 jobs. These grants and loans will leverage substantial additional private sector commitments. Together, they will be used to create revolving loan funds for small businesses, build inner-city shopping centers, retain or expand industrial facilities, expand and modernize businesses, and support other job creation or welfare-to-work initiatives.

Empowerment Zones.—Over the past five years, led by Vice President Al Gore, HUD has helped create Empowerment Zones and Enterprise Communities (EZ/ECs) in more than 75 urban communities. In almost all of these places, the EZ/ECs have achieved success in leveraging private dollars and expanding job creation. The EZs and ECs report that more than 30,000 people have been placed in jobs as a result of EZ/EC programs, some $10 billion in public and private sector investment has been committed to these places, 4,300 businesses have been served by capital or credit access programs and another 4,500 businesses have received technical assistance.

In short, EZs and ECs have successfully combined tax credits with federal grants and loans along with local resources to attract billions of dollars in private sector investments. Accordingly, we are requesting $150 million in mandatory funding for the fifteen recently-selected Round II Empowerment Zones, under Title XX of the Social Services Block Grant program. The Administration is also proposing to designate ten additional Empowerment Zones (eight urban and two rural). In addition, the President has proposed significant extensions of the wage tax credits and other tax incentives for business investment that were such an important part Of the success of the original Empowerment Zone concept.

Other Economic Development Initiatives.—HUD will participate in the fourth phase of the National Community Development Initiative (NCDI), to be funded at $24 million. This highly successful public/private partnership will help build the capacity of CDCs and other community-based organizations, allowing them to continue their impressive track record as engines of economic growth in low-income areas.

In 1998, the Rural Housing and Economic Development Program was created to fund innovative strategies for rural housing and economic growth. The fiscal year 2001 Budget requests $27 million for this program, an increase of $2 million over last year. We will continue to work closely with other Federal departments, including Agriculture, Commerce, and the Appalachian Regional Commission, to design effective responses to the needs of our nation's rural communities.

In addition, the President's budget supports the Mississippi Delta Economic Development initiative, with proposed HUD funding at $22 million. This is a government-wide effort to jumpstart the economy of a significant region of the country that

has been left behind by the economic boom of the past decade. HUD will work in partnership with other Federal agencies to capitalize on our special expertise in housing and economic development to help revitalize the region's economy.

We are also requesting an increase in the successful Youthbuild program from $42.5 million to $75 million. Youthbuild provides young people with training in the building trades, as well as assistance in securing high school diplomas. We estimate that the program will help over 5,000 disadvantaged youth rebuild their communities at the same time as they learn vital job skills.

ADDRESSING THE AFFORDABLE HOUSING CRISIS

At the core of HUD's mission is the charge to provide housing that is decent, safe and, affordable to all. As I stated earlier, it is actually becoming more and more difficult for low-income American families to afford a decent place to live. Rents have soared in many regions with strong economies. Worst case housing needs have reached an all-time high of 5.4 million households, growing especially fast among working families. As a result, there is a greater need than ever for HUD's programs.

Our fiscal year 2001 initiatives build on recent efforts to reform and restore public trust in HUD's housing programs. Historic legislation created the Mark-to-Market program, which preserves project-based Section 8 housing while bringing costs in line with the private market. We have cracked down on program abuses. Our Real Estate Assessment Center is on track towards meeting our goal of inspecting, for the first time, all 40,000 properties in HUD's inventory of public housing and multifamily insured or assisted housing. And more than 600 troubled properties have been referred to the new Enforcement Center, with 45 percent of the cases resolved and revenues from fines imposed in fiscal year 1999 up five times over the previous year.

Section 8 renewals and incremental vouchers.—HUD is requesting $13 billion in new budget authority to renew existing Section 8 contracts, covering 2.6 million rental units. In addition, we are requesting $690 million for 120,000 new vouchers, the largest increase since 1981. Two years ago, HUD got back into the housing business with 50,000 new vouchers focused on families moving from welfare to work. We topped that last year with 60,000. With this year's request, we are taking the next step. These new vouchers will be targeted as follows: one half, or 60,000, will be "Fair Share" vouchers, to be used by public housing authorities to reduce their waiting lists; 32,000 will be targeted to. those moving from welfare to work; 18,000 will be for homeless persons; and 10,000 will stimulate new housing production That will be affordable to extremely low-income individuals.

New housing production vouchers.—Our proposal for new vouchers includes the first Section 8 housing production vouchers in 17 years. For decades, national housing policy has shifted back and forth between production-oriented programs (that focus on expanding the supply of affordable housing) and income-based initiatives (that provide cash assistance to enable lower-income families to afford rental housing). As we enter the 21st century, it is clear that both approaches are needed if America is to realize the goal of decent housing for all. We are proposing 10,000 housing production vouchers that, in tandem with the Low Income Housing Tax Credit and FHA insurance, will leverage 40,000 total units (subsidized and unsubsidized).

Public housing.—Two years ago, Congress enacted landmark bipartisan public housing legislation, that brought working families into public housing without sacrificing our historic commitment to low-income and very low-income persons. Through our new physical inspections system, we have now inspected every property in public housing—and the results are in: 84 percent of all public housing properties are in sound or excellent condition, and customer satisfaction surveys show that 75 percent of all public housing residents are satisfied or very satisfied with their housing. That's a customer satisfaction rating that beats the banking, the utility, and the retail industries.

HUD's fiscal year 2001 budget continues our efforts to transform public housing. We are requesting a $54 million increase in public housing operating funds, to almost $3.2 billion, or 100 percent of PFS. We also are proposing almost $2.96 billion for the Capital Fund to help public housing authorities modernize or rehabilitate public housing units that are in need of significant repairs or replacement, an increase of $86 million over the fiscal year 2000 enacted level.

Finally, we are requesting $625 million for HOPE VI, which is revolutionizing public housing by replacing obsolete high rises or barracks-style projects with new, mixed-income, mixed-use livable communities and housing vouchers. Through 2000, the program is expected to approve the demolition of 100,000 units. By 2003, our goal is to approve 145,000 units for replacement with hard units or with vouchers.

Home Investment Partnerships Program (HOME).—Since it was created ten years ago, the HOME program has become a proven housing rehabilitation and production tool in both urban and rural America. We are requesting $1.65 billion, a $50 million increase over last year's level. This will provide approximately 103,000 units of affordable housing for both owners and renters through a combination of new construction, rehabilitation, acquisition and tenant-based assistance.

Homeownership.—Over the past three years we have done more than ever to bring homeownership to underserved markets. I'm proud of the record homeownership rate of 66.8 percent; but the real success is what we've done to close the gap for minorities, first time buyers, younger couples, residents of cities. We have increased the affordable housing goals of the GSEs from 42 percent to 50 percent. Fifty percent of their total purchases must aid low- and moderate-income Americans. With higher FHA loan limits enacted by Congress, in fiscal year 1999 we boosted FHA loans to a record 1.3 million—40 percent of which were to minority buyers. Automated underwriting has dramatically reduced underwriting times for applicants. And the process for disposition of foreclosed properties has been improved substantially.

Our fiscal year 2001 budget builds on this record of success. In fiscal year 2001, FHA is proposing to develop a new hybrid adjustable-rate mortgage product. In the conventional market, hybrid ARMs have proven very popular because they offer the security of a fixed-interest rate for periods of 3 to 10 years, while they are more affordable than 30-year fixed-rate mortgages because they carry lower interest rates. Adding this product to FHA's lineup should help 55,000 additional families become homeowners in fiscal year 2001, and will result in an additional $114 million income for the Federal government.

Native American assistance.—Native American housing needs will be served through the Indian Housing Block Grant Program, and the Indian Housing Loan Guarantee Program. Overall, HUD's request for Native American programs is the largest ever—$730 million, an increase of $37 million, including an increase of $30 million, to $650 million, for Indian Housing Block Grants.

Homelessness and Special Needs.—Over the past seven years, we have made significant progress on homelessness in America. When I first came to HUD, the entire Federal government had been spending about the same as just the state of New York on homeless assistance. Since then, we've more than doubled the amount of federal homeless assistance.

But this is about more than just the dollars and cents. It is about a new, comprehensive approach, the Continuum of Care, that we've put in place—a holistic approach aimed at moving people into permanent housing and self-sufficiency. According to a study by Columbia University, we are now serving 14 times more people than we were in 1993. This progress was recognized when last year the Continuum won the prestigious Innovations in Government Award from Harvard University and the Ford Foundation.

By all measures, the Continuum of Care is working. Accordingly, for fiscal year 2001, we are proposing $1.2 billion for homeless assistance, an increase of $180 million. We also propose to shift the source of funds for Shelter Plus Care contract renewals to the Section 8 Housing Certificate Fund, creating additional savings for localities and homeless service providers. This increase, plus 18,000 new rental vouchers to create permanent housing solutions, will address the housing needs of the most vulnerable Americans—those making a transition from the streets back into homes and community life.

We are also proposing an increase of $28 million in the Housing Opportunities for People with Aids program (HOPWA), to $260 million. The Centers for Disease Control estimates that between 650,000 and 900,000 Americans are living with the HIV infection. In addition to renewing all existing programs, the funds requested in fiscal year 2001 will provide for an additional 5,100 housing units for persons with AIDS, bringing the total to nearly 50,000 units nationally.

Elderly and the disabled.—Our special needs programs also serve the elderly and disabled. We are proposing $210 million for the Section 811 program, which serves persons with disabilities, increasing the fiscal year 2000 enacted level by $9 million.

Recent decades have seen a dramatic shift in America's population, with our elderly citizens leading longer, healthier, and more active lives—a shift that will only accelerate in coining decades. The challenge now is to meet the housing needs of this rapidly expanding population of elders. Just as we work to save Social Security, we must also work to provide housing security for our seniors.

Last year, Congress enacted major elements of HUD's Housing Security Plan for Older Americans as part of our fiscal year 2000 budget. This year, we are proposing a total of $779 million for our elderly housing programs, an increase of $69 million. We propose to increase funding for Section 202 housing to $629 million; $50 million

to convert existing Section 202 housing to assisted living; $50 million for new assisted living facilities; and another $50 million for service coordinators. Within Section 202, we are also proposing up to $5 million to fund a small number of "Intergenerational Learning Centers", an exciting concept that will tap the skills and energy of seniors to help meet the needs of children in daycare centers located in Section 202 housing.

JUSTICE FOR ALL—ENFORCING FAIR HOUSING LAWS

The Fair Housing Act prohibits discrimination in the sale, rental, and financing of housing based on race, color, religion, sex, national origin, disability, or family status. Yet, even at the dawn of the 21st century, housing discrimination, in both blatant and subtle forms, continues to plague our country. Today's discrimination is often more subtle than it was in the past, but it is no less real and no less damaging to our social contract as a nation that values equality of opportunity for all.

And now there's an even newer venue for discrimination—the Internet. For all the good it can do, the Internet can also be a distribution mechanism for hate, prejudice and bigotry. We recently filed charges in a recent Fair Housing case that combines all three types of discrimination: the old style, graphic discrimination that is so shocking and appalling, the newer, institutionalized discrimination, and the even newer frontier of cyber-hate.

So we must do more. Two years ago, President Clinton announced his commitment to doubling the number of Fair Housing enforcement actions by the year 2000. To help complete this effort, we propose to increase the Fair Housing enforcement budget by 14 percent—to a total of $50 million.

Our budget request provides for increased funding of both the Fair Housing Assistance Program (FHAP) and the Fair Housing Initiatives Program (FHIP). In 2001, the focus of FHIP will be on requirements for accessibility for people with disabilities, with an emphasis on education and outreach programs to housing providers.

In 2000, Fair Housing Partnerships are being created to form a formal links between private Fair Housing groups and state agencies. These partnerships will be used in 2001 to provide training and technical assistance to builders, developers, architects, building code officials, and others on accessibility requirements through a nationwide Project for Accessibility Training and Technical Assistance.

CREATING SAFE AND LIVABLE COMMUNITIES

Our communities face a number of threats to sustainable development, from uncontrolled growth to crime and drug abuse, from environmental hazards and a lack of energy efficiency in housing to blight and under-investment in vital community infrastructure. Many of these challenges call for cooperative regional solutions that span jurisdictional lines.

Promoting Livable Communities.—Congestion, hours-long commutes, a decrease in the amount of open space, pollution, and other environmental issues all have a detrimental effect on the livability of American communities. HUD recently convened a two-day conference, called Bridging the Divide, to focus on how cities, suburbs, and the federal government can work together to achieve more livable, sustainable communities. More than 200 state and local government officials and civic, community, and business leaders participated. A key theme that emerged from the conference was the importance of revitalizing the core of our of central city areas in order to decrease the negative effects of suburban sprawl.

We are proposing a $25 million Regional Connections initiative as a key part of the Administration's livability initiative. These funds may be used by states, partnerships of local governments, businesses and civic groups to develop and pursue smarter growth strategies that cut across traditional municipal lines.

We also propose to double the funding for the Brownfields Initiative, to $50 million in fiscal year 2001. This will accelerate the Administration's previous commitment to a four-year, $100 million program.

Because of an increased effort on the part of the Federal government to reduce the exposure of children and their families to lead poison, we are requesting $120 million for HUD's Lead-Based Paint Hazard Control grant program, a 50 percent increase. As part of a new national strategy and by leveraging private funds, the goal is to eliminate childhood lead poisoning—including eliminating lead hazards in approximately 2.3 million units of housing by the year 2010.

Promoting Safe Communities.—Despite the extraordinary success we have achieved in reducing crime rates in public housing and elsewhere, crime and gun-related violence poses a major threat to HUD's obligation to help ensure "a decent home and a suitable living environment for every American family."

Funds from a variety of HUD programs—including the Community Development Block Grant program—have long been available to help make areas in and around communities HUD serves safer. This year, however, HUD plans a particular focus on improving the safety of America's neighborhoods.

A recent HUD report, *In the Crossfire,* specifically looked at the problem of gun violence in public housing. It found that public housing authorities have made extraordinary progress in reducing crime of all kinds, in some cases by as much as 70 or 80 percent. That is a result of strong local initiatives, the Administration's community policing and crime prevention efforts, and the added resources HUD has made available to public housing authorities through the streamlined Drug Elimination Grant program and other programs.

At the same time, our report showed that, according to reliable data from the Department of Justice National Crime Victimization Survey, public housing residents are still two and a half times more likely to be victims of gun violence than the population at large. That is a statistic that cannot be ignored, and HUD's fiscal year 2001 budget addresses it directly.

The fiscal year 2001 budget proposes $345 million in Public Housing Drug Elimination Grant funds to support efforts to reduce drug use and related activity and other crime in and around public housing. Of the total, HUD has requested $30 million for a Community Gun Safety and Violence Reduction Initiative, which will help address the critical issue of gun violence in and around the communities HUD serves.

Strengthening community partnerships.—A key component of strong communities is the strength and capacity of their organizations. Because of the trust they build and the strong connections they forge, community and faith-based institutions can be uniquely placed to help bring about community change. We are proposing to support the work of our Center for Interfaith and Community Partnerships with a $20-million initiative to help community and faith-based organizations expand their capacity to supply affordable housing, create economic opportunity, and increase their use of HUD programs.

We are also proposing $69 million in Section 107 technical assistance, including $37 million for colleges and universities to carry out community and economic development activities in their local communities. This will include grant funds for several successful initiatives, including Community Outreach Partnerships (COPC), and New Markets University Partnerships in "new market" areas. Another $5 million is proposed for new Tribal College Partnerships.

CONCLUSION

HUD's fiscal year 2001 budget reflects the progress that HUD has made over the past three years. It does more than add funds to programs: it's a budget that contains innovative, smart, and creative proposals for addressing the new challenges of the 21st century.

This budget gives those people and places left behind a unique opportunity to share in this nation's overall success—not with bigger government, but with smarter government. Not just with additional resources, but by more effective use of the resources we have. Not by top-down mandates, but through menus of opportunity. And not by displacing private markets, but by clearing the way for them to invest.

HUD today is leaner, smarter, more effective than ever. The nation is prospering economically and at peace in the world. Our cities and rural areas, once lagging behind, are doing better than they have in a decade. Now it's time to build on this extraordinary success—time to bring this prosperity to every corner of America.

I look forward to working with this Committee, and with the Senate, to make this vision a reality, not just for HUD, but for all Americans.

NBC REPORT ON HOUSING

Senator BOND. Thank you very much, Mr. Secretary.

To go back to the questions I raised in my opening statement, put a human face on the issue of HUD's failure to act as a good neighbor and a good landlord, over a year ago NBC ran a piece on fleecing of America, on FHA's failure to manage its inventory of single family properties. In that segment, Commissioner Apgar challenged the finding and remarked how FHA had instituted new controls and procedures to improve its management and sale of homes, but as I have seen in Missouri, and I am sure you are

aware from Senator Mikulski's concerns in Baltimore, it is questionable whether the evidence has showed things have improved. Since the airing of the NBC report, the inventory has grown by 10,000 homes, and HUD has foreclosed over 70,000 homes.

To illustrate the problems of what happens when HUD is in the position of preserving an affordable rental housing complex, I want to air a video of a couple of these news segments, and then I will ask a question related to them.

[The information follows:]

[From NBC Nightly News, February 25, 1999]

HUD AS A LANDLORD

VOICE. The Department of Housing and Urban Development in Washington owns a lot of housing across this country. It can represent, all that housing, a great deal of value if it is kept up, but for an agency that specializes in dealing with housing problems, critics say there are some big holes in its oversight responsibilities. NBC's Bob Faw tonight on the fleecing of America.

Mr. FAW. Imagine the house next door is an eyesore, and the owner is Uncle Sam, in this case the U.S. Department of Housing and Urban Development.

Ms. JOHNSON. They said they were going to do something about it, but they never did.

Mr. FAW. Bad as these properties look outside, inside they are even worse. In here it is absolutely overwhelming, and according to the most recent Government data, published a year ago, this is just one of 800 foreclosed properties which HUD owns in Chicago, many, say critics, in shambles.

Our organization said the same pattern exists in Indianapolis, in Buffalo, and in Cleveland. Foreclosed homes which HUD pays private contractors to maintain are collapsing.

VOICE. Bad housing isn't nice.

Mr. FAW. For 30 years she has complained that Washington has fleeced homeowners, letting abandoned homes deteriorate, wrecking property values in neighborhoods. Today she says the situation is just as bad.

Ms. CINCOTTA. Now we have our Government, FHA, HUD being the biggest slum landlord in the United States.

Mr. FAW. HUD says the charges are outrageous, insists scenes like this are misleading and represent just a handful of its national inventory of 40,000 properties.

Mr. APGAR. I think our programs are well-run. We've been engaged in extensive reforms to improve our monitoring and oversight of our home-selling process over the last several years.

Mr. FAW. But the Government's own watch-dog, the independent General Accounting Office, strongly criticizes how HUD manages property. No taxpayer money is involved, but for mortgage payments of 7 million FHA homeowners HUD spends $1 million every day to maintain properties like this.

Ms. ENGLAND-JOSEPH. I would say they aren't doing a very good job. HUD is not providing the kind of contract management that it needs to protect the Government's interest.

Mr. FAW. In its survey they found that 37 percent of the HUD properties inspected in Illinois contained imminent hazards, and in Boston it found continuing evidence of problems which the GAO that could threaten the health and safety of neighbors and potential buyers.

Mr. APGAR. It is an old report that does not reflect where we are today.

Mr. FAW. HUD maintains it does not permit situations like this, but the GAO remains skeptical.

Ms. ENGLAND-JOSEPH. They don't know how bad it is. Not a lot has really happened to change, to improve the problem that we identified.

Mr. FAW. Certainly not the kind of problems some of our neighbors want fixed.

VOICE. I don't care for them, not really, because they don't do their job.

Mr. FAW. Even where their job is costing millions.

Bob Faw, NBC News, Chicago.

Senator BOND. Mr. Secretary, to illustrate how things have not improved, these are some still photos of dilapidated HUD homes in Independence and Kansas City, Missouri.

OAK HOLLOW APARTMENTS

This is a news clip from Dallas TV on the Oak Hollow Apartments.

VOICE. From last month's news, that HUD was taking over the Oak Hollow Apartments to clean them up was like a gift from above to residents like Takulah Robinson.

Ms. ROBINSON. Over here, they gave me a new stove, a new sink, and a new refrigerator.

VOICE. But now she's losing it all. Today, HUD held a meeting to tell residents how they were going to help pay for them to leave the apartments they had just fixed up, because they are tearing them down, leaving many tenants with the question——

VOICE. So why can't HUD fix our homes up so we can continue to stay here?

VOICE. HUD now says that it would be too expensive to completely rehab Oak Hollow.

Mr. O'BRIEN. HUD is tearing down a lot more affordable housing than they are building.

VOICE. Tom O'Brien of the Dallas Tenants Association said HUD watched this property deteriorate for 20 years, and it's throwing in the towel.

Mr. O'BRIEN. Really, when they start improving HUD housing the same thing is going to happen over and over again.

VOICE. HUD officials told the displaced tenants they can use vouchers to move to better properties, but some of them don't believe they'll be moving up at all. Some tenants who have been moved before said the shortage in affordable housing could put them in another bad situation.

VOICE. It's no better across the street than over here. I don't want to move from one to another HUD.

Mr. Secretary, 100 residents have been displaced. Five families remain. They have filed a lawsuit to block HUD's plans to demolish it.

I know that Senator Mikulski is going to ask some questions about single family problems, so I will not go into that, but I am troubled about what we saw on the tape about Dallas, and I understand it is not an isolated case. We have heard about similar complaints from tenants evicted by HUD in Los Angeles, New York City, Hartford, Connecticut. They are saying that these evictions are HUD policy.

But what troubles me even more is what occurs in my own backyard. I have the pleasure to introduce to you today, and I would ask her to stand up, a constituent of mine, Mrs. Lizzie Lewis, the elected leader of the Pickwick Plaza Tenant Association. Thank you, Ms. Lewis.

Senator MIKULSKI. Hi, Ms. Lewis.

Senator BOND. She resides in a section 8 property in downtown Kansas City. She is among 50 elderly, disabled—elderly and disabled in the building, which is one block from my district office, in an area of economic revitalization. My staff reported to me that FHA Commissioner Apgar personally met with Ms. Lewis and my staff to talk about the fate of Pickwick, and that Mr. Apgar stated that he needed to have legislation from us to get HUD to protect Mrs. Lewis from losing her home.

Mr. Secretary, I thought that was the job of HUD, but I would ask you as my one question this segment, do you need us to legislate a solution to Ms. Lewis' problem, or can you commit today to solve the problem for Ms. Lewis and the people of Pickwick?

PROPERTY DISPOSITION

Mr. CUOMO. Mr. Chairman, obviously, if there is anything we can do within our current power to rectify the situation of Pickwick, we will, and I would ask the Assistant Secretary, William Apgar, who had the meeting, to respond specifically.

But on the overall point, let me just say this, Mr. Chairman. I would agree with the thrust of the pieces. This has been a long-term problem. You hear—in both pieces they said, in one case they said it has been a 30-year problem, in one case there has been a 20-year problem, but I would disagree when you say we have not made progress. On this entire issue of the run-down portfolio, we have made progress in almost every regard.

The, quote-unquote, aged inventory, the time that we are selling homes are coming down, the teacher next door, the officer next door, and now the 6-months or out is really in many ways the most you can do, which is you are just going to give the house away if you cannot sell it.

It is one of the incumbent problems with the real estate business, is when you have foreclosures the homes often get run-down, and then you have to dispose of them.

Also, in conversation with the committee, and I believe this was a collaborative effort, and one we are proud of. We have now privatized the disposition process, so we have gotten HUD out of the business of doing the very things that we saw on the video, the maintenance, et cetera, and we have turned it over to private contractors.

We had a problem with one of the contractors which caused some of the problems, but I am so sure that the privatization was the right way to go, to get HUD out of the business, turn it over to private sector firms who do this, who manage the real estate, and that was an issue that we discussed jointly, and I was proud of that.

PICKWICK PLAZA APARTMENTS

But on Pickwick specifically, let me turn it over to the Assistant Secretary.

Senator BOND. Mr. Apgar.

Mr. APGAR. Yes, thank you. I have met several times with Ms. Lewis when I was out in Kansas City last summer, and just recently with your staff and our staff in Kansas City has been working on this situation.

Pickwick is a story of HUD's effort to get a recalcitrant property owner out of the way so we could come in, secure the building, expand the services, and provide what the tenants need. As you mentioned, this property has many tenants with various sorts of disabilities, and it needs special attention. In order to do that, given the fact that the owner was incapable of upgrading the property, despite some initial efforts, we have begun the foreclosure process. What I explained in the meeting to Ms. Lewis, under the foreclosure process it is our full intention to preserve that property as affordable housing for the residents.

I might add, in the case of the Oak Grove situation, that was still our intention with Oak Grove. The legislation we work with, though, requires us to balance both the needs of the residents, cer-

tainly to consult with them, have preservation as an important goal, but also balance the financial interest of the fund. You know we can get whacked either way of that equation.

You are aware, perhaps, of the JVC properties in St. Louis, where we worked for nearly 12 months in order to secure what we think is a terrific outcome that managed to preserve the affordable housing, bringing foundation funds and other things together, a very good outcome for the residents and for the City of St. Louis.

Our Inspector General, of course, criticized us for waiting too long and not moving to the foreclosure sale, and that was prominently featured in a recent audit of our Department, so while we work with the tenants, there is this competing interest, the financial interest. The process will be as it is required by law. We will offer the city the right of first refusal to take over the building and do what they want to. That will happen in the first instance. If that does not happen, we can decide that the building will be appropriate to be saved and solicit bids through the RFP process.

Ms. Lewis' group is working with an excellent nonprofit, and we anticipate that that bid could be competitive and win the day. Only as a last resort do we sell the property off on the private inventory.

I would suggest that your statistics also are misleading in the sense that the disposition with section 8 is only one of the ways in which we preserve affordability. Many, if not most of our properties have long-term affordability contracts and protections of the residents without the section 8 voucher, so the idea that all the 114 properties that we sold without section 8 were lost to affordable housing is just flat-out wrong. You can go property by property and show the affordability restrictions that are presently on those buildings as part of our sales terms.

Senator BOND. Thank you very much, Mr. Apgar, and I turn it to Senator Mikulski for her questions.

Senator MIKULSKI. Mr. Chairman, I note that the chairman of the full committee is here, and before I go to my questions, which will be extensive, I did not know if the chairman has a statement and a question or two in the interests of his responsibilities.

STATEMENT OF SENATOR TED STEVENS

Senator STEVENS. You are very kind. As a matter of fact, I do not have any questions. I would like to make a short statement, and it is totally provincial.

Mr. Secretary, I am not one to get involved in too many national things with the size of the United States. I have enough problems of my own, without getting into that.

We are going to have a director, a State director I guess it is, vacant now, now that Arlene Patton has left, and I would urge you to name an Alaskan to fill that position, and here is why. We did have a discussion with Mr. Apgar about FHA appraising, and I received a letter that said, and I quote,

> "as a consequence of the unique considerations that implementing the process in Alaska brings, we will continue to maintain the option for your constituents to ask questions and resolve issues related directly to this directly with the FHA staff in Anchorage."

Now, that is working to a certain extent. However, the home ownership centers now are concentrated in Santa Monica, Cali-

fornia. It is impossible for people in our State to deal with Santa Monica, California. They are a different time zone and, what is more, they have no understanding whatsoever of Alaska conditions.

On the fair share section 8 vouchers, each region is supposed to receive a fair allocation. I am told that Alaska, which has one qualifying housing authority, was told to compete for vouchers in Alaska. Our allocation was lumped together with the State of Washington, and they obviously have a great many more people than we do. The net result of that is, is that Alaska has received not one single voucher.

As a matter of fact, I am told there was not one single house built in Alaska last year under the Native section of our State. There are 227 Native housing centers, housing authorities, and they have been in to see me repeatedly this year.

Wyoming, which has a smaller population, considerably smaller than our State, had 81 vouchers, and we received some welfare-to-work vouchers, but I understand that under the lottery system we have never received one single voucher.

I am here to ask you to review the situation in Alaska. We have still got people coming into the 20th Century. We are now living in the 21st, and the areas we are talking about are so remote that it is just impossible to deal with on a lottery system competing with other areas, particularly with Washington State.

I am one of those who fought for statehood for Alaska because we did not want to become a county, or remain a county of the State of Washington. That lumping with Washington is a pill that is a little hard to swallow. Not that we do not love our friends to the south, but they are our southern neighbors, and they are 900 miles away from us.

So I would urge you to have someone take a look at the Alaska scene. We had a regional authority in Alaska. It was going very well. We had an allocation that went directly to the State and, as you know, we—it is not political. Our State government is in the Democratic Party. We are Republicans here, but we are sort of different people in Alaska, and we are working very closely with the State government, and the State government is as perplexed about this as we are.

So I really—I have to go to another hearing. I appreciate your courtesy, Barbara, in letting me make this statement, but I would urge you, have someone take a look at the Alaska scene. We just do not deserve to be left out completely in this housing program.

SECTION 8 VOUCHERS FOR ALASKA

Mr. CUOMO. Mr. Chairman, I thank you for the comment, and I agree that the State, while beautiful, poses many unique challenges. With the chairman's assistance I had a great tour of the State.

I do not know the numbers on our production in Alaska. What you say troubles me, if the production is that low. I will find out, and I will report back to the chairman on exactly what we have done in Alaska, and on the State director's position, obviously we have civil service guidelines to go through, but I think to do that job well you would almost by definition need to be from Alaska,

otherwise you cannot really appreciate the situation, and if there is any way we can do that, we will.

Senator BOND. Good answer, Mr. Secretary.

Senator STEVENS. Thank you very much.

Senator BOND. Thank you very much, Mr. Chairman.

Senator Mikulski.

Senator MIKULSKI. Thank you very much, Mr. Chairman.

In my opening statement I did not acknowledge the role of the HUD Inspector General, Ms. Gaffney, in her investigation of flipping, and also her recommendations, and I look forward to pursuing a line of questioning with you, Ms. Gaffney, and also want to thank you, because the Federal law enforcement in Maryland I know has been working very closely with your inspectors.

INTRODUCTION OF ADVOCACY GROUPS

Mr. Chairman, the Secretary introduced his team. I want to introduce my team. In addition to my very able staff, it is wonderful networks in Baltimore that really are my advisors, and I would like to acknowledge in the room Mr. Ken Straw, the president and CEO of the Southeast Community Organization, a group that I was one of the founding mothers to save the neighborhood from a highway that was going to destroy several neighborhoods. Now we are working with SECO to save the neighborhood from FHA and predatory lending.

In addition to that, we have Mr. Vinnie Quayle from St. Ambrose Housing, one of the largest groups associated with advocacy for home ownership for the poor in Baltimore. Mr. Quayle has worked in the community for 32 years.

Then there is Mr. Ed. Wittowski of the Patterson Park Community Development Corporation. This CDC is new, and it came in because of the need to prevent what was happening to a neighborhood called North of the Park, because of what had happened when we tore down Lafayette Housing for HOPE VI the housing commissioner took the poor and literally dumped them into a neighborhood that was quite fragile, causing neighborhood destabilization.

But rather than turn against the poor, we turned to each other and established a very dynamic community development corporation, only then to find that the very poor we were helping began to be exploited by predatory lending. They have outstanding testimony that they gave on Monday.

PROPERTY FLIPPING

I want you, Mr. Chairman and members of the committee, to see this chart. See all those little dots? Now, first of all, this is not my chart. This is not Barbara Mikulski who takes old neighborhoods and puts little red, pink, and blue dots up. Every dot, that chart was developed by Southeast Community Organization after on their own did labor-intensive searches about what was happening to the exploitation of the poor.

Every dot represents a flipper, a flipper who bought a house for 15 grand, bilked a consumer, usually someone moving from welfare to work, false appraisals, mortgage bounty hunters and up. Each one of those represents that.

If you looked—and the blue dots represent one major investor-flipper, and he is currently under criminal indictment in Baltimore. I will not go into his case, because again, legal proceedings, but there is heartbreak there. That is really heartbreak.

Senator BOND. What are the red dots?

Senator MIKULSKI. Well, the red dots are other flippers, and they each represent a particular owner or investor, or those that are being under investigation.

We want to acknowledge the role of the IG Inspector, the United States Attorney in Baltimore, and also the FBI, and the Post Office Inspectors are involved because of wire and mail fraud.

Now, five more indictments that have occurred in Baltimore, and essentially we have the need for two strategies, Mr. Chairman, one the prosecutor strategy, in which if you are a flipper, you have broken criminal laws, and we are coming after you. That is number one. But number two is the preventive strategy to prevent predatory lending, and also to deal with the results of FHA-held property.

Now, what I would like to do is ask the Secretary to outline in more detail what his solutions are for doing this. Mr. Secretary, I will not—because of your responsiveness to the Baltimore hearing, I will not go into a set of questions I had for your FHA Administrator. I will not go through the questions that I had about what did you know and when did you know it, and what the hell did you do about it, but I feel that I have confidence in you, that you now know about it, and now you want to do something about it.

I am not here to finger-point, but I am here to pinpoint solutions. Could you elaborate on the methodology that you want to have on the preventive aspects while we are working in another dimension for the prosecutions?

BALTIMORE TASK FORCE

Mr. CUOMO. Yes. It would be my pleasure, Senator.

The challenge, in my opinion, of this predatory lending problem is, while we have been very good in the past in dealing with isolated parts of this issue, unless we really grab the comprehensive situation, we are not going to make the kind of progress we should. We have done a lot in piecemeal ways, but what predatory lending is saying is, in many ways the entire system is corrupted. The subprime has opened up this new vulnerability, and the predatory lenders have rushed in.

We want to take the City of Baltimore, which again for a number of factors poses, in our opinion, one of the worst manifestations in the country, and design a comprehensive approach using the City of Baltimore in a working partnership, FHA, the full HUD team, the local CDC's, the City of Baltimore, literally coming up with a physical strategy on how to fix this problem in the City of Baltimore.

In the meantime, we will have a moratorium——

Senator MIKULSKI. Let's just stop with that. So you are going to use Baltimore as a laboratory because we are the worst case, and I can assure you, with our mayor and our commissioner of housing working with you, along with our community groups—and I must

say the professional realtors have come in, the appraisers that want to have a professional relationship.

So you are going to use Baltimore as a laboratory for your solutions while you then pursue a national task force, is that right?

Mr. CUOMO. Exactly, Senator.

Senator MIKULSKI. And who will chair that, and when will it become operational?

Mr. CUOMO. It will become operational next week. We want to come up with a proposed membership that we could share with the Senator's office to see what your opinion is of who should be on this, but we will have the full complement of the senior HUD staff, because to do it right, we have to do all of it. We have to do the public housing piece, the economic development piece, the FHA piece, and we would have the senior Assistant Secretaries from HUD, because I think this can be a very valuable experience for the Nation.

It will do something practical for the City of Baltimore, which we have to do, but it will also be the genesis for national policy.

Senator MIKULSKI. Very good. Now, let's talk about national.

Mr. CUOMO. Okay.

Senator MIKULSKI. Which goes to this thing called RESPA.

Mr. CUOMO. Yes. The predatory lending, of which FHA often gets caught up in it, is beyond FHA, beyond HUD, as we said. It deals with truth in lending. It deals with RESPA violations, which is the laws and regulations that regulate the real estate market, fair lending laws.

We would, using Baltimore in the practical, then come up with a set of proposals which represent what we have learned in Baltimore and what we have implemented in Baltimore and recommend that to the Congress through a national task force which would also be having a series of hearings across the country, just to make sure what we have resolved in Baltimore answers the questions in the other cities.

This predatory lending may be a little different in different parts of the country. Baltimore is posing almost all of the different facets, but it may be a little different in Denver, a little different in Los Angeles, so we would have hearings in those areas, four, five, six different areas across the country before we come up with a full national——

Senator MIKULSKI. And I would hope you would look at these, following some of these, but not limited to these factors:

Number one, how best to ensure that buyers have prepurchase counseling so that they know what they are getting into, they know the full range of this. Because there are two issues here, the predators, and the other is that people get into a situation, and not know.

So one, how is a buyer going into this, but how can we protect the buyer without needless regulations?

Two, the appraiser process. Because of the way FHA has changed the way it does business, the seller now furnishes his own appraiser. Well, that is like Bonnie calling up Clyde to see if he wants to be an appraiser, and let's rob the bank together, so we do not want Bonnie calling Clyde. We do not want Clyde to be an appraiser, and we do not even want Bonnie and Clyde any more, so

the question is, what do we do about the appraisers? Community groups have ideas, et cetera. I know the appraiser community has those as well.

Third, you have to look at the mortgage bounty hunters, because there are now bounty hunters on getting mortgages. They get commissions. They get fat fees. They do not care. Again, I know in my own home town of Baltimore the banks are not necessarily the problem, and in fact they have worked with the community for the solutions, but there are these mortgage bounty hunters—and again, not every mortgage broker is a bad guy, and we need to separate that out and how to deal with it, so we need to look at that.

I know that my time is up. I am going to come back for a second round of questions, but those are the core issues, and I think it is in the national interest for the professional associations to work with you, otherwise there are going to be 50 State laws. My own Maryland General Assembly is already working on this, again lessons learned from them, but we either have a national framework, or we are going to be dealing with 50 State laws.

Senator BOND. Thank you very much, Senator Mikulski, and I would just add one thing. Having recently become a condo owner within the last couple of weeks, I can tell you that an hour-and-a-half of going through forms challenged all the training I had in law school and beyond to stay with it, and it has become so complex that even with a law degree, we are protected.

There is a story about the elves who disclosed the location of a pot of gold under a tree. When they went back to dig it up they found that the elves had put yellow ribbons around every tree in the forest and they could not find it, and I have felt like the guy walking into the forest with every tree with a yellow ribbon around it.

Senator MIKULSKI. Well, you see, Mr. Chairman, I concur with you. This is also what came out at the hearing. First of all, when the appraiser, HUD mandates, FHA mandates a license for a certified appraiser for a property over $250,000. Well, three cheers for those who can buy that. And we are glad that FHA protects people who buy property worth more than $250,000. But FHA is not protecting people who buy less than $250,000.

Second, and this then goes to our own mandates, I think in our desire to protect the consumer, we have so many forms that tell so many people so much that they really ground in the settlement. And when we asked the people who had been bilked and really gouged, did you know what was going on at settlement, they said no, we were so overwhelmed we relied on the seller. Well, again, Bonnie put on her lipstick and said everything was okay.

Senator BOND. Thank you very much, Senator Mikulski. I resemble that remark.

Now I would like to turn to a distinguished member of the committee and one who has been a real champion for oversight. We appreciate your being here, Senator Kyl.

CUOMO'S TRAVEL

Senator KYL. Thank you, Mr. Chairman.

Before Senator Mikulski leaves, I just have to say that nobody puts it in more colorful terms than she does.

Mr. Secretary, you are well aware of a lot of news reports relating to your travel for political purposes, and I wanted to give you the opportunity to respond at least in a general way. I will give you an example of one of the reports, and then would ask that you send us, for the record, a list of all of the transportation and related expenses paid by HUD for you to attend and participate in political rallies, and also ask that you tell us what you have done to comply with the Hatch Act requirements for reimbursements.

[The information follows:]

HATCH ACT

All transportation and other related expenses associated with the attendance of any HUD political appointee at a political rally are not paid by HUD, but the organization sponsoring the political event. On those rare occasions when a trip taken by a HUD political employee includes both political and official activities, our Office of General Counsel has established clear guidelines governing the procedures for ensuring that HUD is reimbursed in accordance with the Hatch Act for any portions of such trips that involve political activity. These guidelines are communicated to all HUD political appointees through Hatch Act training seminars conducted by the Ethics Law Division of our Office of General Counsel.

Senator KYL. One of these events was alleged to occur on March 3rd of this year in Huntington, New York, reported in the Suffolk Life Newspapers and the Long Islanders Record. One of the headlines reads: Politics, not housing forum as posted. And the concerns expressed by attendees was that the forum was posted as an opportunity to come hear you talk about housing programs and how people might participate in them, but in fact it turns out to be a rally for Vice President Gore.

Do you recall that particular event, and can you tell us what was the purpose of the event? Did HUD pay for any of the costs associated with that event, including any travel or lodging of food?

Secretary CUOMO. Thank you very much, Senator, for the question. There is a Presidential election going on obviously. And I have a preference in that election, which is Vice President Gore. And I have campaigned for him. When I campaign for him, that is, quote, unquote, a political trip and it is paid for by the political committee. And the trip I believe that the Senator is referring to was a trip to Long Island to campaign for Vice President Gore. And that is what it was. And that is what it always was when I am doing campaigning, as any other official, Senator, Congressperson, et cetera. I was campaigning. I was doing political work, political activity, which is different than when I am in the official capacity.

Senator KYL. And so that was paid for then by the Gore campaign or some other political entity?

Secretary CUOMO. Yes, sir. Whenever I am on political activity, it is paid for by the political committee.

Senator KYL. I would suggest that, given the concern expressed by at least one of the attendees and backed up by one of the area aging representatives that the event was publicized as an opportunity to hear you talk about housing matters, and with no indication it was political, that you might ask your folks to ensure that when word goes out about such an event that it is very clear as to whether or not it is an official function of HUD as opposed to a political event.

Secretary CUOMO. Senator, when I go to an event—I think it was clear that it was a political event. Unfortunately, people still sometimes take the opportunity to pose their HUD-related questions even though I am on a——

Senator KYL. I am sure about that.

Secretary CUOMO. Yes. And I wish I could say, oh, no, I am sorry, I am not going to talk about that today because I am on a political day. So they will often ask a housing-related question or a Federal-related question, even though I am there for a different purpose. But I am sure everyone experiences that.

Senator KYL. And certainly people can have different views. But I re-initiate my request, because here is a representative of the Suffolk County Office of Aging who said that she sent a member of her staff to the meeting because she was informed that the subject would be senior housing. So I think it is important to make sure that people are not misled about the subject of those meetings.

Secretary CUOMO. Senator, if I might just so we are clear, I may also talk about housing as an issue when I am doing political activity.

LOS ANGELES COMMUNITY DEVELOPMENT BANK

Senator KYL. That is clearly understood. Let me ask you a question about the Los Angeles Community Development Bank. As you know, in 1992, HUD funded the bank at over $400 million. The idea was to rebuild part of the riot-torn Los Angeles at that time. But also, as you know, the bank has been a disaster from the beginning. It is barely solvent at this time, I understand.

Most recently, I am informed, the bank lost a $7.2 million lawsuit because the court found that the bank directly caused the total loss—that is a quotation—of Summit Industries. But the administration still continues to push for funding for HUD to administer a new program, called America's Private Investment Companies, under which HUD would underwrite loan guarantees for private businesses, totalling some $1.5 billion in private debt and equity.

When you look at Los Angeles and the fact that HUD contends that it has closely monitored the situation—in fact, in an answer to a question, the concluding sentence is: HUD will continue to closely monitor the City's oversight of the bank. Given HUD's obvious inability to closely monitor well, why would we ever think that HUD actually has the capacity to pick the winners and losers in these kinds of complex economic deals?

Secretary CUOMO. Senator, the Los Angeles Community Development Bank was very much an example of the methodology that this committee has suggested over the years. This was a proposal, the bank, by the local government, the City of Los Angeles, which was their proposal, their idea for the best way to do economic development in their city. And we at HUD have very much respected local government. We do not believe there is one size fits all. We do not sit here in Washington and say to the City of Los Angeles, let us tell you what to do.

The City of Los Angeles said, this is what we think we need to do. We need to put together a community development bank, use it as a model to engender economic development. And they requested funds from the Federal Government to do this. They came

in with a full proposal. We funded their proposal to do this community development bank. There has been, obviously, at best, fits and starts with the development bank. The City government is working very closely with the bank. We have been monitoring the situation.

The City feels, and the bank represents, that they are improving—and they have a new business plan and a new CEO—and that the situation is going to get better. Obviously if the situation does not improve, we are going to have to take action. But, whenever possible, we do defer to the local governments, the State governments, on the best way to solve a problem in their backyard.

Senator KYL. I think that is a good principle. But in view of the fact that my time is up, let me just make the comment that this whole business of underwriting and the APIC proposal, to me, suggests, and what has occurred in Los Angeles, suggests the danger of trying to pick these winners and losers with this kind of federally funded kind of programs.

APIC

Secretary CUOMO. I understand, Senator. Just so we are clear, APIC is a different model, however.

Senator KYL. Well, it may be a different program, but it does require the picking of the winners and losers from an economic point of view, in who you are going to lend the money to.

Secretary CUOMO. No, I am sorry, Senator. Under APIC, we would have a private capital firm do that. We know what we are not good at. And under APIC, it says we bring in a private firm, let them do the underwriting, let them make the decisions, because they are in a better position to do that than HUD.

Senator KYL. Well, since my time is up, I will not pursue that.

Secretary CUOMO. Thank you.

Senator KYL. Thank you, Mr. Chairman.

Senator BOND. Thank you very much, Senator Kyl.

I am going to impose on the very good nature of my friend, Senator Leahy, because I have some good news and bad news for you, Mr. Secretary. The bad news is that I have to leave here at 11 o'clock, so I will not be able, at least for the next half hour or 45 minutes, to participate in the questioning, and I want to have one more round of questioning, turn it over to Senator Leahy.

Senator MIKULSKI. But I will be here.

Secretary CUOMO. Is that the good news?

Senator BOND. That is the good news.

Senator MIKULSKI. That is the good news.

PRESERVATION

Senator BOND. The other good news is I have to be in the budget committee to vote out a budget, which will get us the money that we need here. We feel we need at least $6 billion for the expiring section 8 contracts alone. So I go forward with a mission that I think we could all agree on.

But let me go back to some of the questions and statements made about the video. You discussed the need to create a production program, suggesting using FHA single-family default reserves as a way to leverage funding for low-income, multifamily housing. However, HUD's stated policy for its HUD-owned and HUD-held

properties is to voucher out all families, even the elderly and disabled. This means that we are likely losing these units for low-income use and certainly for very low-income use.

For the record, I include a property disposition memorandum for Gary Eizerman, Deputy Assistant Secretary for Housing, that compels the vouchering out of these properties and replaces existing handbook requirements. Mr. Apgar, you mentioned that HUD preserves its HUD-owned inventory through other means besides section 8. But I understand that you only do this by setting ceiling rents at levels often that are not affordable to very poor people.

In fact, the folks in Dallas told us that these ceiling rents for Oak Hollow would be above the real market rent. So that does not sound like affordable housing to me. How would you square this policy with your acknowledgment that we need to produce additional affordable, low-income housing?

Secretary CUOMO. Thank you, Mr. Chairman. In general, as I said in the previous question, this has been—and as the video said—a 20- to 30-year challenge for HUD. My point was we are making more progress on this issue today than we have at any time certainly in the past 7 years. The numbers, the arrows are headed in the right direction. There is further to go, but the arrows are headed in the right direction.

Also, we have undertaken, again, in coordination with the committee, the first physical inspection of all HUD properties in the country. Before, HUD never knew the condition of their physical properties. We literally would ask the owners, what is the condition of the building? But we did not have an independent physical inspection. We have completed, for the first time ever, physical inspection of every property. So now we can say, if it is rundown, if it is a slum, we are not going to continue to subsidize a slum. The Federal Government should not be in that business. And I am very proud of that also. And, again, in coordination with the committee.

Let me ask Assistant Secretary Apgar to respond to your specific question.

Mr. APGAR. Well, of course, the Department's policy is to, with every instance, preserve the affordable housing. That is why we launched our mark-to-market initiative last May, and we are preserving a significant number of housing through that. That is why we work with the authorizing committee to produce new authorities to allow us to preserve the aging 236 inventory. And that is having a dramatic effect.

So it is not our policy to voucher out all HUD properties. The memorandum you refer to is simply clarifying how we finance the funding of the property during the period in which HUD holds the property. The properties typically have been getting section 8 funding prior to that. And while HUD is in possession of the mortgage or in the process of moving the owner out, we continue to fund the property through access to the vouchers. And so that simply was a reminder of how to go about the mechanism of funding the property during the period of HUD holding.

Again, with respect to Oak Hollow, we are awaiting a response from our offer to sell the property. And we anticipate there will be a number of development proposals that will use various resources

in order to produce affordability in that development. So we still are looking for a good outcome in Oak Hollow.

Senator BOND. Do you provide section 8 funding on disposition?

Mr. APGAR. Not always. In selected instances, for the project-based funding of section 8. We always provide resident-enhanced vouchers, which is of course the law. And the vouchers, in most instances, work. And if it is a tough situation, we bring relocation specialists in, and others. As you are aware, we did that in the Kansas City case, where we had to relocate residents out of the Brush Creek development, where there were families and other folks that needed special assistance in order to relocate.

Secretary CUOMO. Mr. Chairman, just so we are clear, we run into the issue which you have raised repeatedly, which is sometimes you are in an area where the section 8 voucher does not work especially well because the market is so hot and the market is so tight that you cannot find the unit that you can afford with a voucher. And it is in those areas, as the chairman has pointed out correctly so I think, that we need to talk about production, because vouchers are not doing the trick.

Senator BOND. How will you solve the problem Mrs. Lewis and her neighbors have?

Mr. APGAR. How are we going to solve it?

Senator BOND. Yes.

Mr. APGAR. Under our current authority, of course, we are working with the State to make sure the residents are provided appropriate social services. The city has the right of first refusal to purchase the property and do what it can in terms of bringing in affordable housing. We have a decision to make as to whether or not we are going to go the negotiated sales route, in which we would put the property forth for an RFP competition. And, again, that would allow the residents to form a nonprofit group and purchase the property, as was done in many instances.

If it turns out that the property is judged to be too far gone—and this is one of the worst properties in the inventory, probably in the lowest 2 percent in terms of overall physical condition—it may require so much resources that the decision is that it is not able to financially secure a preservation outcome, in which case we may not be able to go that route. And then a sale on the open market is the final and last choice. Believe me, our goal is to preserve every property we can through as many means as we have.

SMALL CITIES PROGRAM

Senator BOND. Mr. Secretary, we will be watching. And let me conclude by saying that last year's appropriations bill transferred the administration of the CDBG Small Cities Program from HUD to New York. I assume the transfer is complete. Could you give me assurances that that is done?

Secretary CUOMO. Yes, sir.

Senator BOND. Thank you.

Now it is with great regret that I leave, turn the gavel over, and call on Senator Leahy to continue the questioning.

NBC REPORT ON HOUSING

Senator LEAHY. Thank you, Mr. Chairman.

I watched with interest the NBC piece. And I rarely ever watch television news, but I seem to recall that one. And I am told that that was actually aired over a year ago and used data from 2 years ago. I assume that there has been a great deal that has gone on in the past 2 years since that. Am I correct that the gross sales price per property has increased over the last year and the average time homes are held in the inventory has decreased?

Secretary CUOMO. Yes, Senator, your observation is exactly correct. First, the piece was dated. Also, the piece was, in our opinion, overly sensationalized. The pictures in that video in no way reflect the HUD inventory. The average home sale for an FHA home is $70,000. Those were not $70,000 homes that we were looking at obviously. As a matter of fact, with that NBC piece, some of the homes that have been shown, we did not even own. And we went back and we demonstrated that to NBC.

And NBC corrected, on air, that piece, which was not shown in the video, the NBC correction. But they were fed, obviously, information for different reasons and they were duped, NBC. But they corrected it on air, which, as you can imagine, NBC Network does not easily correct or admit error, but they did off that piece, which was just aired once again.

As I said to Chairman Bond, we have made tremendous progress in this regard, Senator. We have privatized the disposition process. The values have gone up. The time to sell has gone down. We have done what I consider very creative things with the Police Officer Next Door Program, Teacher Next Door Program, and then the 6-month sale or $1 disposition to the city. You cannot do any more than that. Basically, what you are saying is if it takes us more than 6 months, we are going to give up, forfeit the value of the home, and turn it over to the city.

So I am confident that we are doing just about all we can do with FHA alone. And this piece is in no way representative of where we are. That is not to say the entire situation is going to be remedied. Because the real problem here is not FHA. Senator Mikulski accurately points out that the real problem is predatory lending. And the real problem is fraud in the appraisal process or the lending process or the sale process and victimizing a vulnerable population.

And that issue has to be dealt with, otherwise this is going to be recurring. Because, in some ways, while the piece was unfair to FHA and incorrect to FHA, it is worse than the piece would suggest. Because it is not just FHA, it is private banks all across the country that are falling prey to this predatory lending scheme.

GAO HIGH-RISK LIST

Senator LEAHY. Am I also correct that the GAO is reevaluating HUD's status?

Secretary CUOMO. Deputy?

Mr. RAMIREZ. Yes, sir.

Senator LEAHY. Any indication that the current risk status may change?

Mr. RAMIREZ. Well, as it was mentioned earlier, Mr. Walker, from GAO, has acknowledged that we have made considerable progress. We have addressed the issues that have led the agency to a high-risk designation, and have made credible progress in re-

gard to addressing them, and feel very confident that as a result of our HUD 2020 management reform that, by the end of this year, when the review will be complete and a report will be coming out on all agencies, that we will be prepared to come off this high-risk designation, sir.

Secretary CUOMO. And, Senator, if I might quickly state. There is no doubt that this is a political year and there is political posturing all around. But on the management of HUD, we have come a long way. And GAO, which is always used as the credible source of the criticism—and I have been here for 7 years and I have heard GAO bandied about whenever convenient—GAO says we have made credible progress. They say that we are on the right track from a management point of view and that we have made management progress. And if we can use the GAO to criticize, then we should also use the GAO to confirm.

SMITH & WESSON/HUD AGREEMENT

Senator LEAHY. Let me go into another area that has probably seen some controversy. HUD and Smith & Wesson, you normally do not think of those two in the same sentence, but you have gone into an agreement to provide trigger locks with all firearm sales, requiring authorized dealers to conduct background checks and so on. My understanding is you want to keep the guns out of the hands of criminals, but also we all know how tragically the results are when they get in the hands of unsupervised children.

You and I, Mr. Secretary, are both gun owners. You have young children in your home, and my wife and I now have a young grandchild who comes around. And I think we both know how to keep weapons out of the hands of children and take all the usual steps. Unfortunately, not everybody does.

I just wanted to clarify some confusion, because I got some calls about this from some members of the law enforcement community. They were wondering whether the Federal Government was mandating the purchase of firearms from only those manufacturers that have entered into HUD agreements.

My understanding, and what I have told them, was that HUD is advocating only voluntary preferences to Smith & Wesson or any other firearm manufacturer that adopts similar public safety measures, but the final purchasing decision is still going to be up to State and local law enforcement agencies. Am I correct in that?

Secretary CUOMO. That is exactly right, Senator.

Senator LEAHY. I thought it would be good to clarify that. It is amazing—if I might just take a moment, Senator Mikulski, on this—because I come from the only State in the Union, as near as I can tell, that has no gun control laws, except during deer season we limit the number of rounds in a semiautomatic to give the deer at least a sporting chance.

But we also have a real sense of gun safety in our State, mainly because most of the, or a large percentage, of the households grew up with firearms in the household. But I hear from Vermonters across the political stripe that we have got to do something to have some area of restriction. And most of the gun control measures that have been proposed have been very modest.

We have the juvenile justice bill which Senator Mikulski voted for and I voted for. It passed the Senate, I believe, 73 to 25 last year. And now we are coming up on the anniversary of Columbine and it is still sitting, tied up in a conference committee because the gun lobby has said it cannot come out. And I think that is a mistake.

Again, as a gun owner, I would say, for whatever it is worth, and I have said this in other places, the gun lobby may be making the same mistake it made when it opposed a ban on the sale of cop killer bullets, that they wanted to allow the cop killer bullet sales to continue. A lot of people in law enforcement, a lot of people I worked with when I was a prosecutor, were pretty upset with that. I think a lot of parents are very upset with what is happening now. And I think a lot of parents, you are going to find, are going to agree with the position you have taken with Smith & Wesson.

Thank you.

Secretary CUOMO. Thank you, Senator.

Senator MIKULSKI [presiding]. Thank you, Senator Leahy.

Mr. Secretary, I do want to continue one line of questioning, but, before I do, I am going to say a couple of things. First of all, the President's request is for $32 billion in a variety of categories that I want you to know I support. And I look forward to working in the appropriations process, as the budget committee goes through its analysis, to do what I can to ensure the integrity and follow through on the President's request.

I think it is an outstanding request and it does go to HUD's core programs. And we can talk about the elderly, HOPE VI, increased section 8's, about those things. And I do not want them, in this conversation, to get overlooked.

Secretary CUOMO. Thank you, Senator.

Senator MIKULSKI. So I want to assure you of that and look forward to working with you and your team on it. Because, under President Clinton's leadership, not only has the HUD budget been restored, but I think innovations in housing have been. So we do not want to have this hearing end without acknowledging the significant efforts there and the reforms, the continuum of care for the homeless, which continue as your signature issue, and so on. So I really do want to say that and acknowledge that for the many people who work with you.

Secretary CUOMO. Thank you very much, Senator.

Senator MIKULSKI. Now, just to continue again on our other conversation related to flipping and FHA disposal. Senator Leahy, in his questions with you, really you were able to cover the ground. But, once again, it is in the macro level. So if you look at all of FHA, all of FHA is a success. But there are these significant Super Fund sites at FHA that need to be contained.

I personally am very enthused about the teacher/cop initiative, in which we can have public servants, often who are on very spartan income for their contribution to the community, often can maybe buy homes in the very neighborhoods we would really enthusiastically welcome their presence in. What I see in my own hometown of Baltimore, we have three kinds of neighborhoods: siege, stress and stable.

By focusing really one set of strategies on siege, hopefully we contain it. But if we focus on stress, which is really what we are talking about here, we want to see them go to stable and not to siege. And the cops and the teachers are just a wonderful tool. We would welcome them in all three of our categories, but, still, a very welcome thing. I look forward to really being an advocate for the teacher and cop program, and I think it is a very innovative one, and also rewards public service and teaching and public safety.

BALTIMORE FHA DEFAULT RATE

Let us go back to the FHA. One, there is the predatory lending issue, but then there is also the regular consumer issue. One of the significant flashing yellow lights in Baltimore has been the tremendous default rate with FHA housing. Over 50 percent of the houses bought in Baltimore have resulted in default on their mortgage payments. Now something is wrong somewhere.

Part of that is the predators, the bums, the scum, that we are really going to go after, both preventive and prosecution. Remember, we have got our two strategies: prevention and prosecution. But I really need either your comments or as part of your overall review here to focus on why there was such a mortgage rate. We are not laggards in Baltimore. We are not a culture that abdicates responsibility. And it is enormously troubling that something is wrong somewhere, when people get into perhaps housing or buying a mortgage that they cannot.

Do you have any comments on that?

SECTION 8 VOUCHERS

Secretary CUOMO. Yes, I do, Senator. And if I might just quickly make a comment on the Senator's first point, which is the overall HUD budget, and clarify for the record a statement that the chairman made that suggested that I said that Senator Mikulski and Congressman Stokes were responsible for a budget that zeroed out vouchers. That was never the case. I never said that and it is not a fact.

The vouchers from 1994 were rescinded by the 1995 Congress. And that is the first time the number of vouchers went to zero. It stayed that way for 4 years, and then we got back into the business. And that is, in my opinion, one of the causes for the backlog of affordable housing today. And I understand the sensitivity when that number keeps going higher and higher and we did so little for that 4-year period. But it was not under your leadership or Congressman Stokes.

BALTIMORE FHA DEFAULT RATE

On the overall default rate, the Assistant Secretary is going to comment on the FHA default rate, but I think you are exactly right, Senator. That is not just a flashing yellow light, that should be a flashing red light and a bell and a gong. Everything should go off. Because that default rate really just shows the total dysfunction of the system.

It is a bad appraiser or a bad appraiser and a bad lender or a bad appraiser and a bad lender and a bad broker. But that higher

default rate says something is not right. It is the calling card of predatory lending, et cetera. It is corruption. And a 50-percent default rate, to me, just is so outrageously high that it is almost hard to imagine that it has been that high a level. But let me ask the Assistant Secretary for his comment, if I might.

Mr. APGAR. Just one point of clarification. There are undoubtedly in the neighborhoods—and we were talking to Mr. Quayle yesterday—where half of the FHA mortgages are in default. And when you factor in the whole city, counting the stable neighborhoods and the like, we are still above the national average.

Senator MIKULSKI. I do not want to hear this.

Mr. APGAR. But let me tell you——

Senator MIKULSKI. I do not want to hear this. I do not want to hear about national averages.

CREDIT WATCH SYSTEM

Mr. APGAR. No, no. I said the rest of the city. The defaults in the city are 11,000 mortgages that are in default. But I agree exactly with what Secretary Cuomo said. And that is why we created our Credit Watch System. When we see areas where the defaults are higher, we see lenders that are higher, we do not go through this lengthy legal process. We bring them in. We ask them to explain what is up. We make sure the data is right. But if they are way out of whack, we terminate them. That is the Credit Watch System.

You know, much to the cheers of the residents of Baltimore, one of our first entities terminated was a Baltimore lender, Capital Mortgage. And that system shows that we can quickly go in and address people who are generating bad loans through defaults. We are also now bringing online this new appraisal reform system where, for the first time, starting on March 1, all the lenders are required to send information to us about their appraisals online. So we can screen the appraisals and get a handle on who the bad appraisers are.

We have kicked 12,000 appraisers off our list. We are stuck with this kind of lender-select, Bonnie and Clyde system. That was what Congress gave us. But we have been doing a whole lot of appraisal reform, saying given that we have to run our system that way, we have, for the first time, testing requirements for all our appraisers and we have the new appraiser guidelines, and we have this new automated appraisal fraud system. So, we are on it.

But there is no excuse in these neighborhoods for these high default rates. You are exactly right.

Secretary CUOMO. And also, Senator, if I may, let me give you one of the reasons why we need legislation. We have this Credit Watch, which says if you are a lender who has a disproportionate default rate, you are out. We had a notoriously bad lender who had a disproportionate default rate. We said, you are out. They went to court and they are still in.

Senator MIKULSKI. Well, let us look at the legislative recommendations. But also there is another aspect here which I would look at, which is buyers needing really to be prepared to enter into home ownership. One of the great successes of welfare reform is when these people move from welfare to work they want to be

homeowners. We heard in our hearing, though, that no one told them about, gee, you have to pay property taxes. And there are just a whole series of other things. There were the gougers and the schemers, but there are people who are buying houses that do not really understand that, because they look at a monthly payment that seems like that is what they are going to pay for the month, until they get in it.

So I do not want to go over repeating the Baltimore hearing. You have the testimony on that. And you will be meeting with this Baltimore ops task force that I think will be very good.

The other thing is I am going to refer you to the fact that GAO and the I.G. found that there were inadequate controls over the real estate assessment management, otherwise known as REAM contractors, and that this had resulted in the deteriorating conditions in HUD properties. I am going to be discussing this with the I.G. in a minute, but I think we really do need to take a better look at that.

The second thing is that in your testimony you said that you hope to have a report to Congress in 8 weeks. We understand that that is not a magic number because we want you to be rigorous and thorough. But we also do not want to process it to death. I think there is the mood of the Congress, the chairman and I, and so on, who want to do it. So I want to discuss with Senator Bond what is the best way to follow up. Should we hold another hearing with you? Should we have a roundtable with you and some others? Should we have a meeting?

We will discuss this with Senator Bond and move on, and then see how we can really have not only just a report filed. Because I do not want a report that goes to the staff and we all look at it, and golly, gee whiz. You know there is a heightened urgency to move our appropriations. We will be moving in June and July. The chairman is committed to moving our bill promptly.

So we want to have whatever we can do through the appropriations there and the opportunity to review authorizing with Senator Gramm and Senator Sarbanes as to what would be appropriate to do through the appropriations process. But promptness, so we do not want to make the perfect the enemy of the good.

Secretary CUOMO. Senator, if I might say, I cannot tell you how excited we are about this opportunity. And we are going to get you the report in 8 weeks, because we do not want to lose this moment. It feels like there is an energy about this moment. Chairman Greenspan has talked about this. There have been numerous newspaper articles about this. And we want to seize the moment, if you will. We want to get you the report in 8 weeks.

We will make a difference to Baltimore. We will also make a difference to the Nation. And with your leadership, Senator, I think we can do some of the best work that we have done over these 4 years this last year. Because this is the problem, in our opinion, that can make a marked difference.

NONPROFITS AND PROPERTY FLIPPING

Senator MIKULSKI. I really thank you for your hands-on approach to this, number one, the attitude and frame of mind to really let us get this done. Number two, I really again appreciate the hands-

on approach that you have taken to that. And I know that you will continue this through the process. Because there are two other issues I am going to bring. As we look at FHA, we really need FHA to approach this and not be defensive and not give you any recommendations that are CYA.

We do not want CYA recommendations and macro this and national that and so on. We know macro and national. While we knew macro and national, we had this rotting in other areas. So we do not want a CYA approach from FHA.

The other concern that I have—and I would like the analysis on this rather than giving my opinion—but I do not want HUD to become a flipper to nonprofits in the city. Nonprofits do not have, often, any more money than the very poor in their own neighborhoods, nor do very strapped city governments have this. So I do not want HUD, FHA, to say, we will cosmetic our own situation and flip it to a nonprofit or flip it to a city that cannot afford to do anything anyway. And a Mayor O'Malley or a Mayor Daley or a Mayor Riordan or other mayors end up holding the inventory with no money to do anything with it again. So let us not become enablers here.

And I believe my concerns are valid; your solutions might be very good. But I think if we are going to turn them over to nonprofits and we are going to turn them over to a city, that nonprofit in that city is going to need to have the money to make the repairs. Because the homes I walked in are in pretty bad shape. And whether that movie was a year old, 2 years old, still, the conditions have validity. I mean the deteriorating conditions.

So let us really think this through, and do not inadvertently create more of a problem, by shifting the problem out of FHA and shifting it to a nonprofit and shifting the problem to a city. So let us be very careful. Because we like to have this nostalgia, oh, let us give it to the community. The community is saying, hey——

Secretary CUOMO. No, thanks. Yes.

Senator MIKULSKI [continuing]. We do not have the resources either. They are busy. I know the three groups over there are always foraging for funds. So we cannot have them foraging for funds just because we are going to unload a problem on them.

Secretary CUOMO. I agree, Senator.

Senator MIKULSKI. I want to thank you. And I think for this situation this concludes my questions.

Senator BOND [presiding]. Thank you very much, Senator Mikulski.

Something toward and unusual happened when I arrived at the budget committee to vote at 11 o'clock. They finally told me they were not going to vote at 11 o'clock. This has never happened before. So, fortunately, I am with us for a few more minutes, until they decide to start the votes.

FNAM/FREDDIE MAC

Changing the subject, Mr. Secretary, recently I sent a letter to Mr. Apgar, the FHA Commissioner, regarding a Washington Post article that attributed statements to him that Fannie Mae and Freddie Mac's underwriting policies are essentially discriminatory

by leaving blacks out at a rate that is disproportionate to other minorities. I am troubled by this statement on several levels.

First, my view and my experience in my State at least, I have seen Fannie Mae and Freddie Mac leaders—being the leaders in fact—in making housing credit available to all people, regardless of race or any other characteristic. And I wondered if that is the view of the Department or if that is only Mr. Apgar's views or whether he was misquoted. Could you clarify the position of the Department on that?

Secretary CUOMO. Yes, Mr. Chairman. I will ask Mr. Apgar to speak to his comments. The Department's position is this. We are the regulators of Fannie Mae and Freddie Mac. They get significant public benefits. Some estimates say that Fannie Mae gets $6 billion in public benefits. One of the questions is: What does the public get back for their $6 billion? How many affordable, quote, unquote, loans is Fannie Mae actually doing? And how many is Fannie Mae doing compared to the private banks, commercial banks, that get no subsidy?

You will hear many private bankers who say, look, we are doing more than Fannie Mae does and we are not getting any subsidies. Why is Fannie Mae getting $6 billion to do less than we are doing as private lenders?

We try to balance all of that out. And we set the affordable housing goals, which are basically the percent that Fannie/Freddie must do to justify their public benefits. We just raised those goals from 42 percent to 50 percent. We did that in cooperation with them.

That will, Mr. Chairman, do more to provide affordable housing than the entire HUD budget combined over the next 10 years. So that is a massive contribution to affordable housing.

But let me refer to Assistant Secretary Apgar to clarify his statement.

Mr. APGAR. Right. And the reason we raised the affordable housing goals is because our analysis—a view which is shared by Fannie Mae—is that they can do more in these market areas.

The particular comment in the Washington Post related to their lending in African-American communities. And our data suggests that Fannie Mae in fact does not lead. This is the same as the Secretary was saying. Their record is not as strong as other lending institutions.

In that very same article that you quoted, Frank Raines himself conceded that point, by saying, Fannie Mae today does not lead in the African-American lending, but we will. Which is the partnership we formed with them in order to expand their lending and to embrace the higher goals.

Now, with respect to discrimination, that relates to issues that the Department is reviewing relative to a totally different set of authorities. We have engaged with Fannie Mae to review their automated underwriting system. This is being done by Gail Laster, our General Counsel and Eva Plaza our Assistant Secretary for Fair Housing and Equal Opportunity.

Again, Fannie Mae has been cooperative in that. It has been a very difficult undertaking, because this involves very complicated software and other things that they believe contain proprietary secrets. So we have set up a separate division to do that in order to

protect the confidentiality of their information. That review is not completed, and I did not comment on that review in the article or anywhere.

The same article pointed out that HUD officials were careful to note that Fannie Mae does not discriminate. And we have no evidence that they did or not. The review is underway. And it is not a review under my control.

Senator BOND. Mr. Apgar, the sense I got from that article was that you had reached the conclusion that they were discriminating.

Mr. APGAR. I did not reach such a conclusion. I reached the conclusion that they were not lending at the same rate as other banks in the area; that approximately 5 percent of all the loans done in the conventional conforming market are made to African-Americans. Fannie Mae, that year that was under review, did 3.2 percent of their business. Freddie Mac was even further behind at 3 percent. And I simply pointed out the fact that they were not serving this community as well as others in the marketplace.

That is the basis. This general need to improve their outreach to a variety of underserved communities is the basis for expanding the affordable housing goals, as the Secretary mentioned.

Secretary CUOMO. Mr. Chairman, if I might comment. I think the difference comes in the inference. It was not Mr. Apgar's statement, as I read the statement. The story did say the conventional lenders, who get no subsidy, are doing about 5 percent to the African-American community. Fannie and Freddie are doing about 3 percent. Why are Fannie and Freddie doing less than the conventional lenders, who are getting no subsidies? You could argue they are doing it through CRA.

And is the reduced amount the result of discrimination is the inference, is the hanging question. But no one at HUD said that. The exact opposite happens to be true. We announced the affordable housing goals cooperatively, and we are doing a fair housing review right now. Currently, we have no conclusion, no outcome, no opinion.

FHA COMMISSIONER'S RESPONSIBILITIES

Senator BOND. The second part of it that concerns me about Mr. Apgar's statement is relating to fair housing and their underwriting policies and business decisions. I think HUD has acknowledged that the FHA, in fact, acts as a competitor to these government-sponsored enterprises. And as a result, since FHA, which is in Mr. Apgar's responsibility, runs a competitor, HUD decided it was necessary to build a firewall, a formal delegation of Mr. Apgar's authority, on all GSE fair housing matters to the Assistant Secretary.

That means that Mr. Apgar should not be reviewing or commenting on information that would reasonably be considered proprietary business information for Fannie Mae and Freddie Mac. So, in a nutshell, what are Mr. Apgar's responsibilities with regard to HUD's regulation of Fannie Mae and Freddie Mac? And what safeguards has HUD put in place to protect Fannie Mae and Freddie Mac's proprietary business information?

Mr. APGAR. I will be happy to answer these questions, but I would like to propose, with your permission, that I enter into the

record the letter that I sent to you just on Monday which gave my full answer to all these questions, which are very similar to the letter that you sent me last week.

Senator BOND. I look forward to receiving it. Thank you.

[The information follows:]

LETTER FROM WILLIAM C. APGAR

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT,
Washington, DC, March 27, 2000.

Hon. CHRISTOPHER BOND,
United States Senator,
Washington, DC.

DEAR SENATOR BOND: Thank you for your letter of March 20, 2000, regarding the level of service that the Government Sponsored Enterprises (GSEs), Fannie Mae and Freddie Mac, provide minority borrowers. As you know, HUD has recently published for comment proposed new affordable housing goals for Fannie Mae and Freddie Mac. While recognizing the progress that both organizations have made in expanding access to capital for low- and moderate-income borrowers and underserved communities, the rule proposes that both entities substantially expand their efforts in these areas. Indeed, both GSEs have broadly endorsed the proposed higher goals and have pledged to expand their affordable housing efforts. Although I have already had the pleasure of briefing your staff on this rule, I would be happy to provide any additional information you request.

Your letter also references a recent Washington Post article which states that, "Apgar and others said that the two companies' policies have had the effect of leaving blacks out at a rate that is disproportionate to other minorities, whether intended or not, and has been a pattern for years." You then say with respect to this quote from the article that "this presumes that these two companies are guilty of discrimination in their housing underwriting policies." I would suggest to you that based upon the facts known today that you should not reach this presumption, as I and others at HUD also have not done. In fact the paragraph in the article you quote from begins by stating that, "HUD officials have been careful, to avoid the word discriminate when talking about the companies' practices because they say that would imply that Fannie Mae and Freddie Mac are purposely denying blacks access to mortgage loans."

First, let me clarify for you that I never said, nor to my knowledge does HUD have any evidence that Fannie Mae and Freddie Mac are acting in a discriminatory manner, nor to my knowledge has HUD charged that the GSEs are operating in a manner that is inconsistent with fair lending laws. Rather, as part of HUD's effort to develop a proposed rule on new affordable housing goals for the GSEs, HUD prepared an assessment of GSE performance in the market place, and an analysis of whether or not the GSEs "lead or lag the market" in their purchases of mortgages from various categories of lending, including lending to particular demographic groups. The Post article presented information from the rule showing that in terms of home purchase and refinance mortgage lending in 1998, both Freddie Mac and Fannie Mae purchases failed to match market rates of lending to minorities, particularly African-Americans. This is factual information which is the basis of HUD's proposed rule requiring the GSEs to be more active in this market sector. It in no way supports the presumption which you have suggested.

Fannie Mae disputes HUD's analysis as it relates to all minority families, but does not dispute the conclusion as it applies to African-Americans. Indeed to Fannie Mae's credit, they recently, announced major new initiatives to significantly increase their outreach to minorities in general, and African-Americans in particular.

Your letter also referenced the fair lending review of the GSEs' automated underwriting systems and requests information on FHA's role in this review. You also state that your concern stems in part from the fact that "FHA is a competitor of these government sponsored enterprises." As you note, Secretary Cuomo has delegated to the Assistant Secretary for Fair Housing and Equal Opportunity the authority to review Fannie Mae's and Freddie Mac's underwriting and appraisal guidelines, including its automated underwriting systems. And as you note, HUD has augmented its usual safeguards by establishing internal protocols and "firewalls" to protect the confidential business and/or proprietary information that may be provided by the GSEs. These firewalls are as thorough and complete as both Fannie Mae and Freddie Mac required. Indeed, neither Fannie Mae or Freddie Mac would turn confidential business and/or proprietary data over to HUD until the Depart-

ment had agreed in writing to the GSEs' respective satisfaction that these "firewalls" were in place and effective. HUD is committed to maintaining these safeguards in accordance with our agreements.

Your letter does not distinguish (as I do), my role in monitoring GSE progress in meeting their obligations under the affordable housing goals, and the equally important, yet clearly separate, obligations of other HUD officials in the area of fair lending and fair housing. At no time have I made public statements. concerning any of the details of the Department's review of underwriting and appraisal guidelines, other than to state that this review is underway. Nor do I have access to any proprietary or confidential information received by the Department as part of this review.

In contrast, my public statements concerning the GSEs performance focused on market analysis completed as part of the development of the affordable housing goals rule. In establishing these goals, among other things, I am required by law to consider national housing needs; economic, housing, and demographic conditions; the ability of the GSEs to lead the market in making mortgage credit available to low- and moderate-income families, very low-income families, and families in areas underserved by mortgage credit. Accordingly, I am responsible for taking into account the housing needs of minorities in relation to any shortfall in the GSEs' performance in the purchase of mortgages made to African-Americans, Hispanics or other minorities.

Next, I would like to reassure you that FHA is not a competitor of Fannie Mae and Freddie Mac. The GSEs provide liquidity and stability in the mortgage market, by purchasing and holding loans originated by private lenders. In contrast, the FHA provides mortgage insurance to millions of families not able to obtain financing in the private market. FHA has an important public mission which is a complimentary relationship with the GSEs, not a competitive one. The Congressional plan for addressing the Nation's housing needs is that both FHA and the GSEs should work side by side in helping more Americans realize the dream of homeownership. The ongoing partnership between FHA and both Freddie Mac and Fannie Mae to develop and deploy automated underwriting systems for FHA loans is a good example of the benefits of cooperation between FHA and the GSEs.

Finally, you request information on HUD's effort "to ensure consumers have full information about how mortgage decisions are made by the GSEs." In a speech last fall at the University of Virginia, Secretary Cuomo challenged the mortgage industry to "demystify" the homebuying process by helping consumers better understand the decision making process. At the same time, he said that FHA should lead by example. As a result, FHA is now developing new tools designated to increase the transparency of the FHA's underwriting process.

The Secretary's speech was widely hailed by all segments of the mortgage industry, including the GSEs. Indeed, in January, Fannie Mae announced its own plans to expand consumer information about their underwriting systems. More recently, they have pledged to develop underwriting systems that are not dependent on FICO scores, a proprietary credit scoring system that has been over the years the source of considerable concern among housing advocates.

My comments on this topic simply reflect my own belief in the importance of expanding consumer knowledge and information about the homebuying process. As you know, HUD has requested expanded funding for our Homebuying Counseling Initiative in our fiscal year 2001 budget request to your Committee, a request that I trust you will support. I believe in the power of consumer information and education. Despite your statements to the contrary, I never said that I intended to "force" disclosure of trade secrets of the GSEs. As noted earlier, HUD has detailed procedures in effect, procedures that were formulated after extensive conversation with the GSEs, to protect any proprietary or confidential information received as part of HUD's regulatory responsibilities.

In closing, let me once again thank you for your interest in the GSE affordable housing goals and the equally important effort to assure that the GSEs adhere to applicable fair housing and fair lending requirements. I stand ready, along with my HUD colleagues, to provide you or your staff any additional information you request.

Sincerely,

WILLIAM C. APGAR,
Assistant Secretary for Housing-Federal Housing Commissioner.

FNMA AND FREDDIE MAC PROPRIETARY INFORMATION

As Congress continues its deliberations in the development of the fiscal year 2001 Budget for the U.S. Department of Housing and Urban Development (HUD), I would like to express my ongoing willingness to be of assistance during this impor-

tant stage of the legislative process. As you know, HUD continues to make great strides in meeting our mutually shared goal of helping to build stronger American communities. Over the past several years, HUD has made significant progress in implementing key management reforms contained in the HUD 2020 Reform Plan and in providing states and localities with much-needed assistance for affordable housing and economic development activities.

There is much good news on the state of the nation's housing and job markets. A total of $70.7 million American families owned their own homes in the first quarter of this year—more than at any time in our history—raising the nation's home ownership rate to an all-time high of 67.1 percent. In addition, the nation's economic expansion—the longest period of peacetime economic growth in U.S. history—continues to create new jobs and economic opportunities at a steady pace.

Despite these encouraging trends, there is still a tremendous need for targeted federal investments, particularly for communities that have not fully benefited from the nation's unprecedented economic growth. For instance, HUD's latest estimates place the number of very-low income renters with worst case needs for housing assistance at a record-high 5.4 million families. These very low-income families are either paying more than half their incomes for rent or are living in severely substandard conditions. In addition, a recent study conducted by the Urban Institute underlines the need for continued assistance to combat homelessness. According to this study, between 2.3 million to 3.5 million Americans are likely to become homeless at some point each year, including 900,000 to 1.35 million children. These are but a few examples of why HUD's role will be as vital as ever for the families and communities that have been left behind.

I believe the subcommittee hearings conducted earlier this year on the status of the President's fiscal year 2001 budget proposal resulted in a constructive dialogue and raised important issues for improving Federal efforts to expand affordable housing and spur the creation of new jobs and economic development opportunities. What emerged from our discussions was a clear consensus on the importance of HUD's mission to serve at-risk families and communities. Since then, I have worked diligently to see that the particular issues of mutual concern that were raised during these hearings are addressed in a timely and effective manner. We have continued our efforts to transform public housing, to combat homelessness and to improve the operation of key HUD programs such as the HOME block grant, the Housing for Persons With AIDS (HOPWA), and the Section 202 Housing for the Elderly and Section 811 Housing for the Disabled programs.

In addition, HUD has moved swiftly to address other critical housing issues such as predatory lending and the impact of deceptive and unfair lending practices in specific neighborhoods. The Joint Task Force, convened by HUD and the Department of Treasury has held the second in a series of regional forums on this important issue. The Task Force plans to release a comprehensive report and a list of recommendations for possible legislative proposals to ensure that the scourge of predatory lending, which has impacted too many of the nation's elderly, low-income families, and at-risk communities, is stopped.

I look forward to continuing to work together to strengthen American communities and families through sensible government reforms and investments in affordable housing and economic development activities. As always, please do not hesitate to contact me if I can be of further assistance.

Mr. APGAR. I hope you have received it, since we faxed it on Monday. But, if not, we will make sure that you see a copy of it.

Let me just start off by saying that it is our opinion that FHA is not a competitor in the sense that you describe it. FHA is mortgage insurance. We operate in the primary market. Fannie Mae is a secondary market actor. It provides liquidity and stability to the secondary market. So we are in different businesses. So we do not compete. In fact, Fannie Mae could purchase FHA mortgages, and they are doing so today. So we are in different businesses.

We do have this interest in automated underwriting, which is central to some of their proprietary interests. We are developing our own system. In fact, we are developing our system to move us beyond where we started. Fannie Mae and Freddie Mac, together, helped us get our first automated systems up and running, and now we are developing our own.

In order to make sure that our work in providing our own development of our automated underwriting systems in no way benefitted or in no way let information from the automated underwriting review move out into the broad universe of people concerned about these matters, I was asked not to participate, and be firewalled off from that automated underwriting review that is happening on the fair housing side.

With respect to the firewalls, all I can say about that is there was extensive negotiations with Fannie Mae and Freddie Mac about the firewalls. And based on that information, they were able and willing to send over to the Department literally thousands and thousands of records of data. Fannie Mae I think came to the conclusion that the firewalls were sufficiently rigorous—and we can get you more on that if you would like—that they were comfortable with going through in the process of reviewing the loans. So that is the best I can say. They have signed off on the firewalls and I think they are effective.

Secretary CUOMO. Mr. Chairman, this was somewhat puzzling. Fannie Mae requested, in essence, the firewalls. Because they wanted to make sure, when they were providing their information for this fair housing review, that there was no advantage to FHA, which was also developing something called an automated underwriting system, where they have secret recipes, we call them, secret formulas. So we created the firewalls at Fannie Mae's request essentially. They were satisfied. They sent over the information. We are now reviewing the information.

So I do not understand why they would have a problem with the firewalls which they requested.

Senator BOND. I think the question was whether those firewalls were being implemented.

Secretary CUOMO. They are.

Senator BOND. And that is the question that was raised by the comments I saw from Mr. Apgar. But let me ask another question.

Mr. APGAR. The part about my authorities, of course, in terms of monitoring the GSE goals, commenting on their performance with respect to underserved communities is central to my role as the person involved in the goal-setting operation. Making comments about different demographic groups, different racial groups, how they are faring in the marketplace is essential.

As a matter of fact, our rule, which is now under public comment, has extensive comments on how Fannie Mae and Freddie Mac's lending is doing in low-income communities generally, in Hispanic communities, in African-American communities, in all types of communities. That is a congressionally mandated obligation of us as we put forth these goals, to look at different market conditions, to look at different demographic groups. So my comments were well within my authority in the goal-setting and had nothing to do with the issues relating to the automated underwriting review. And again, I do not understand why there would be confusion over my role and comments as a goal-setter in the affordable housing arena.

MARK-TO-MARKET

Senator BOND. Mr. Secretary, let me ask you one last question before turning it back over to Senator Mikulski again. We appreciated your statement that you acknowledge that the mark-to-market legislation we worked on over 2 years ago was a need corrective to a serious situation. In this body, though, sometimes we forget that passing a law is just the first step and that implementing the law is often a bigger challenge. One of the complaints that we have heard about HUD's implementation of the program has been the failure to use fully the housing finance agencies in administering the program as intended by Congress.

I know there have been numerous disputes about compensation, conflict of interest requirements, and perhaps most troubling, is the objection to the prescriptive nature of the program that HUD has designed. Finally, I understand that not one mortgage has undergone a complete restructuring yet. That means that a significant amount of section 8 savings that we had previously anticipated have not yet been realized.

What is the status on this? And has HUD fully complied with the letter and the intent of the law?

Secretary CUOMO. Yes, Mr. Chairman. As you rightly pointed out, this section 8 crisis—the chairman was referring in his opening comments by the loss of units—I think one of the greatest challenges we faced were these expiring section 8 contracts, and still today. The mark-to-market was a way to deal with it. And Mr. Peppercorn is here. He is the Director of the unit called OMHAR that does that.

This is, as the chairman pointed out, a very difficult transaction in general, because you are trying to renegotiate. But I believe we have made more progress than the chairman's comment would suggest. And I would ask Mr. Peppercorn to give you the updated information. I believe we have about $60 million in savings.

Senator BOND. If we could make that very brief. I just want to know the overview. If you could do that in less than 60 seconds.

Mr. PEPPERCORN. I certainly will. To your first point, I have a copy of the GAO report with me which actually says that what we did in terms of the negotiations with State and local agencies was absolutely within the statutory requirements. In terms of what we have completed, I will not go into too much of the technical details, but there are actually 122 transactions that have been approved by OMHAR.

These are what are called LITES. They are not restructurings. They are rent reductions without restructurings. The estimated savings will be $215 million. The discounted savings over 20 years are $128 million, against $12.2 million that we have spent. In other words, we are saving money at a rate, once fully implemented, at ten and a half times the cost of doing the deals.

Senator BOND. Thank you very much. And we will follow up with you on those.

Now I turn the questioning back to Senator Mikulski.

Senator MIKULSKI. Mr. Chairman, I have really concluded my questions for this phase. I think we now move on to the implementation of the excellent methodology presented by the Secretary. Mr.

Chairman, the Secretary wants to and is going to move as promptly as he can on these national and Baltimore laboratory task forces, and hopes to have something for us in the 8-week, roughly, period. And I would like to then discuss with you whether you would want to hold another hearing on this or a roundtable or just meet with the Secretary.

Senator BOND. Let us see what the schedule is. We may be asked to move more quickly. We still have a number of hearings in the other agencies in this committee.

Senator MIKULSKI. Why do not you and I talk.

Senator BOND. We will discuss this and see whether we can take care of all of our responsibilities and come back to a hearing on this.

Senator MIKULSKI. But I hope you would concur that when the Secretary finishes his analysis that we really have a face-to-face conversation with him, using whatever is appropriate to our schedule.

Senator BOND. We will, yes.

Senator MIKULSKI. I have advised the Secretary that both Senator Stevens and Senator Byrd have instructed us to move it in terms of moving your bill to the floor in June.

Senator BOND. And we may have to do a truncated version of a hearing to get that done or just set up a meeting.

Senator MIKULSKI. To see how to go, okay.

Senator BOND. Yes, we will hold that open and work with you.

Senator MIKULSKI. Thank you very much, Mr. Secretary. We look forward to working with you, both on this despicable situation that we find ourselves in, but also on the HUD core programs that I believe are working very well and empowering the poor.

SINGLE-FAMILY FORECLOSURES

Secretary CUOMO. Thank you very much. Thank you, Senator, again. We are excited by the opportunity that you have given us to resolve a national problem. Thank you.

Senator BOND. Mr. Secretary, while the FHA Mutual Mortgage Insurance Fund is presently in good shape, FHA's inventory of single-family homes that HUD has foreclosed on and taken ownership of has more than doubled under your tenure, from 24,000 homes in 1996 to over 47,000 homes currently, despite the fact that this subcommittee has provided significant new tools, including a single-family property disposition program as part of the VA–HUD fiscal year 1999 bill to move the housing into the hands of nonprofits and homeowners. Why the big increase and why have we not seen a decrease in the inventory?

NBC CORRECTION TO REPORT ON HOUSING

Secretary CUOMO. Thank you very much, Mr. Chairman. First, as I just mentioned when you were out of the room, the NBC video piece which you showed is dated and slightly misleading. NBC actually ran a correction on the air about that piece, because there were factual errors in the NBC piece. And you can imagine how hard it is to get a network to run a correction. They do not do that easily, I trust. So there were serious flaws in that piece.

There is no doubt that the long-term HUD problem has been this so-called aged inventory and moving those properties. It is the challenge of any real estate organization, public or private. We have made significant progress. The reason we have more homes is we are doing many more loans. The whole FHA business has gone through the roof. So we are also having more foreclosures.

But, as I mentioned, the radical privatization which changed the entire way we did business is starting to show the positive effect. The average resale is up. The average time of sale is down. And we are now solidly in keeping with the rest of the market. I will ask Commissioner Apgar to respond to your specific point.

Mr. APGAR. Right. The buildup of the inventory has a couple of factors. First of all, we came to the conclusion that our HUD process, the private sector process, just was not able to be up to the task. That is why we brought in the private sector contracts. We had built up from 24,000 to almost 42,000. And many of those homes had no work being done on them, in the sense that they were not appraised, they were not ready for sale.

We brought the new contractors in. There was a period of transition. And for the last 6 months, the inventory has been coming down steadily. As a matter of fact, today we have almost half of those homes that you mentioned in the inventory under contract. Somebody is there waiting to close in the next week or two to buy them. The number of FHA homes we have available for sale—that means are not under contract—is actually down over a year ago and is falling rapidly because of the new private sector contractors.

Secretary CUOMO. And one of the problems, if I might quickly say, Mr. Chairman, when we went to the privatization, one of the contractors who we selected defrauded us. A company called In-Town. And that has caused us operational problems that we are working through. We are bringing action against In-Town. But one of those contractors who we privatized to did misperform, did mislead us. We believe we have a legal action. But that has caused a delay.

Senator BOND. Mr. Secretary, I understand that before the privatization of FHA management and disposition, the average loss on the sale of one of these houses was $31,872. After the new program was implemented, I am advised that the loss has increased slightly, to $31,940. Is this a widespread problem? Are we losing more money under this privatization concept?

Secretary CUOMO. I have not heard those numbers, Mr. Chairman. But between HUD being in the real estate business and managing its own properties and privatizing it, the privatization is clearly a much better course of conduct. This committee made that suggestion to us years ago, and they were correct. We should not be boarding up buildings and cutting lawns and doing the resale whenever you can privatize the function. That is much of the advice that I got from this committee.

Mr. APGAR. Yes, I believe the numbers you are referring to relate to an Inspector General audit of this matter. We were unable to replicate their methodology. Our own statistics suggest that, in fact, our recovery rates are up prior to the contract versus now. We are recovering about $4,500 more per home. When you multiply that times the 60,000 homes we signed onto the new contracting

process, that returns over $260 million of savings. So we are saving money by selling the homes faster and at a higher price, as Secretary Cuomo mentioned.

Senator BOND. Mr. Secretary and Mr. Apgar, my apologies again. That is my master's voice calling, and I will turn it back over to Senator Mikulski.

Secretary CUOMO. That is an important vote for all of us. Vote twice, Mr. Chairman.

Senator BOND. Early and often.

Senator MIKULSKI [presiding]. We are back to the good news.

Secretary CUOMO. That is right.

HOUSING FOR FIREFIGHTERS

Senator MIKULSKI. Mr. Secretary, I think that concludes my questions. I think we have had a very rigorous and thorough hearing. We look forward to the implementation of your methodology and ongoing conversations on the other aspects of the HUD budget.

One of the things I would like you to ponder for when we talk again—let us go to the teacher/cop program that I know we are mutually bullish on—would you think about expanding the part also to firefighters? Because if we think about teachers, cops and firefighters in a community, that is really wonderful community leadership and so on. Because both are involved in public safety. And our firefighters risk their lives every day. They truly are on the line of fire—no pun intended. And their compensation is often quite modest.

Secretary CUOMO. Senator, as this is an appropriations hearing, I think HUD is going to do a little appropriating of many good ideas—this idea of the firemen next door program, I think I now hear it being called. We had a meeting yesterday with Mr. Quayle, who had some good ideas. We are going to appropriate those also. So, yes, there is a lot we can do together. And I think the firemen next door program has a nice ring to it.

IG EFFORTS IN HOUSING FRAUD

Senator MIKULSKI. Thank you very much. This phase of the hearing is concluded and we look forward to working with you.

We now turn to the HUD I.G., Ms. Gaffney. Thank you very much.

Secretary CUOMO. Thank you very much. Thank you for having us.

Senator MIKULSKI. Ms. Gaffney is next. Could I have some order here. I know the enthusiasm you all want to share with each other. We can do that out in the hall.

I understand Ms. Gaffney is not scheduled to testify formally. But, Ms. Gaffney, would you take the witness table, because I would like to say a few things, please.

Anybody who would wish to be enthusiastic in their conversation, we love enthusiasm, but we need to hear the witness.

Ms. Gaffney, first of all, I know you are not prepared to give testimony.

Ms. GAFFNEY. No, Senator.

Senator MIKULSKI. But I would like to just review a few things with you, if I might.

Ms. GAFFNEY. Please.

Senator MIKULSKI. First of all, thank you, thank you. I know that, on a bipartisan and a bicameral basis, we appropriated $18 million to the HUD I.G. for their to be respective HUD I.G. audits in key cities. I know you caught a lot of grief over that. And that was a melancholy situation in which accusations to both you, against you, and also the members of the House were unfounded.

It is my observation that the HUD I.G.'s office and that appropriations of funds, along with many other things that you have identified, led to really significant work on this predatory lending. Am I correct in that?

Ms. GAFFNEY. You are correct.

Senator MIKULSKI. And I know that there are ongoing investigations. I will not ask about those. It would not be appropriate to ask about them. But the task force, under the aegis of the Baltimore U.S. Attorney, has apprised me of your work—meaning your team's work—and we really want to thank you for the housing fraud initiative in uncovering these flipping issues and also the issues related to FHA disposal, which are not criminal.

So we have got two areas that we are looking at, and we invite, as we move along with the Secretary's methodology, your advice and insights. I have got your letter to me in response to my questions.

And there are two issues that I am deeply concerned about. One, how we can prevent predatory lending and any insights you have on preventing well-intentioned people getting in over their head and thus contributing to the default rate of FHA. But predatory lending is the number one issue. So we welcome your insights that will come out of your task force work on what we can do to prevent this virus, and essentially giving too many Bonnie and Clydes too many opportunities to rob the taxpayer and gouge the poor.

The other is what we would call the prosecution part. And whatever tools the I.G. needs to continue their housing fraud initiative, the committee would like to be aware of, to be able to continue investigations and work with appropriate law enforcement for both investigation, which will, for those that are criminals, lead to indictments and prosecutions. I must say that your presence and the vigorous response by the U.S. Attorney in Baltimore, and other U.S. Attorneys, and the acknowledgement of that—not going into the details of investigation—by the press has already had a chilling effect on the flippers.

Because, you see, they know you are coming. They know the FBI is coming. They know the postal inspectors coming. They know the HUD I.G. is coming. Really, it is like Silverado, with you coming over the hills. And the fact that they know that you are coming, you—literally, you, meaning the HUD I.G.—but the full muscular, vigorous weight of the Federal law enforcement coming after the flippers and the chain of gougers who are committing criminal offenses has had a chilling effect. Because they know prosecutions could very well lead to convictions. And as you know, under our current Federal statutes, these would be sentences without parole.

So for all those white collar criminals, we have already said, if you are a flipper, pack it up and go away, because we are coming and we are here to stay. And if you are thinking about being a flip-

per, do not even go there, because we are coming, all of us are coming.

So I want to thank you for the professionalism of your team. I think, for all the pretty vitriolic criticism directed at you in some local quarters, I think both you, the work of the housing fraud initiative and your vigorous team, I think you have truly been vindicated. And today I think the beginning results speak for themselves.

So I would like to thank you for staying the course and bringing us such a professional team to our own community and many other communities.

Ms. GAFFNEY. Thank you so much.

Senator MIKULSKI. So we look forward to hearing from you what other tools, financial or whatever, to be able to continue to stay the course on the housing fraud initiative. And I am going to wrap up by saying we are here.

Ms. GAFFNEY. Okay.

ADDITIONAL COMMITTEE QUESTIONS

Senator MIKULSKI. We are here. We are going to stay here. This is directed at the gougers. We are here and we are going to stay here until you go away.

Ms. GAFFNEY. We will be there, too.

[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 CHRISTOPHER S. BOND

DISCRIMINATION IN NEWSPAPER ADVERTISING

Question. Mr. Secretary, it has come to my attention that a number of newspapers have been subject to risk of fine or other penalty under the Fair Housing Act in cases where a newspaper may have run an advertisement that is later determined to have a discriminatory effect. Several news organizations have raised concerns that they want to do the right thing but that there are no set or established standards. It has also been suggested that a better approach would be to allow notification to newspapers where there is an issue of discrimination and then allow the newspaper an opportunity to remedy the issue before there is a risk of penalty. This would promote dialogue on issues of discrimination, protect innocent parties and allow for the development of standards that everyone could rely upon. How would you look at this type of system as a way to promote dialogue rather than litigation and what steps would HUD be willing to make to implement such a system?

Answer. Typically, the complaints HUD receives regarding allegedly discriminatory advertising come from private parties who allege that such advertising has resulted in lost housing opportunity. HUD, itself, has not initiated such a case in over 5 years. When HUD receives a case from a person who alleges an advertisement is discriminatory and has caused that person harm, HUD, as a neutral fact-finder, must investigate the complaint. The HUD administrative process, however, affords the parties the opportunity to resolve the matter before HUD makes a determination on whether discrimination has occurred. HUD participates in that process and assists the parties in arriving at a reasonable resolution. Parties have resolved matters alleging discriminatory advertising with the publisher agreeing to cease publication of the subject advertisement.

Individuals also have a private right of action under the Fair Housing Act. HUD is not involved in cases filed directly in court. HUD, however, has provided guidance on how it believes the Act's provisions regarding advertising should be interpreted. This guidance provides a reasonable common sense approach. It recognizes that advertisers and publishers are in very different circumstances. At one time, there was much misinformation circulating among the housing industry and newspaper publishers. For example, there was a belief that the Fair Housing Act prohibited the use of certain words and phrases that a common-sense reading of the Act or the

pertinent case law would not have supported. We put out guidance and wrote letters to individual parties to clarify our interpretation of the law, which we understood addressed most concerns. That guidance is attached.

HUD is open to further discussion on how to promote common-sense enforcement of the Act's advertising provisions. HUD already notifies parties of alleged violations prior to taking enforcement action, and there is nothing which prevents a private party from contacting a person who has published a discriminatory advertisement before taking legal action.

ATTACHMENT

MEMORANDUM FOR: FHEO Office Directors, Enforcement Directors, Staff, Office of Investigations, Field Assistant General Counsel

FROM: Roberta Achtenberg, Assistant Secretary for Fair Housing and Equal Opportunity,

SUBJECT: Guidance Regarding Advertisements Under § 804(c) of the Fair Housing Act

The purpose of this memorandum is to provide guidance on the procedures for the acceptance and investigation of allegations of discrimination under Section 804(c) of the Fair Housing Act (the Act) involving the publication of real estate advertisements.[1]

Recently, the number of inquiries involving whether or not potential violations of the Act occur through use of certain words or phrases has increased, and these issues cannot, in some situations, be answered by referring to decided cases alone. In some circumstances, the Advertising Guidelines, published at 24 C.F.R. Part 109, have been interpreted (usually by persons outside of HUD) to extend the liability for advertisements to circumstances which are unreasonable.

This guidance is meant to advise you of the Department's position on several of these issues.

Previous guidance already requires that Intake staff review a potential complaint, gather preliminary information to ascertain whether the complaint states a claim under the Act, and consult with counsel on any legally questionable matters before the complaint is filed. Likewise, jurisdictional issues such as standing and timeliness should also be established prior to filing.

If the Advertising Guidelines, this memorandum, or a judicial decision clearly indicate that the language used in the advertisement is a potential violation of Section 804(c) and the criteria for establishing jurisdiction are met, the complaint should be filed and processed. Any complaint concerning an advertisement which requires an assessment of whether the usage of particular words or phrases in context is discriminatory, requires the approval of Headquarters FHEO before a complaint is filed. If the advertisement appears to be discriminatory, but the Advertising Guidelines, this memorandum, or a judicial decision do not explicitly address the language in question, supervisory staff must also obtain approval of Headquarters FHEO before the complaint is filed. Potential complaints regarding advertisements which do not meet the above descriptions should not be filed.

Where there is a question about whether a particular real estate advertising complaint should be filed, relevant information regarding the factual and/or legal issues involved in the complaint should be gathered, and counsel should be consulted prior to contacting the potential respondent publisher. The matter should then be referred to the Office of Investigations for review. Such referrals may take the form of a short memo, reciting the applicable advertisement language, and any factual or legal analysis which is appropriate.

Section 804(c) of the Act prohibits the making, printing and publishing of advertisements which state a preference, limitation or discrimination on the basis of race, color, religion, sex, handicap, familial status, or national origin. The prohibition applies to publishers, such as newspapers and directories, as well as to persons and entities who place real estate advertisements. It also applies to advertisements where the underlying property may be exempt from the provisions of the Act, but where the advertisement itself violates the Act. See 42 U.S.C. 3603(b).

Publishers and advertisers are responsible under the Act for making, printing, or publishing an advertisement that violates the Act on its face. Thus, they should not publish or cause to be published an advertisement that on its face expresses a preference, limitation or discrimination on the basis of race, color, religion, sex, handicap, familial status, or national origin. To the extent that either the Advertising

[1] This memorandum does not address fair housing issues associated with the publication of advertisements containing human models, and does not address 804(c) liability for making discriminatory statements.

Guidelines or the case law do not state that particular terms, or phrases (or closely comparable terms) may violate the Act, a publisher is not liable under the Act for advertisements which, in the context of the usage in a particular advertisement, might indicate a preference, limitation or discrimination, but where such a preference is not readily apparent to an ordinary reader. Therefore, complaints will not be accepted against publishers concerning advertisements where the language might or might not be viewed as being used in a discriminatory context.

For example, Intake staff should not accept a complaint against a newspaper for running an advertisement which includes the phrase female roommate wanted because the advertisement does not indicate whether the requirements for the shared living exception have been met. Publishers can rely on the representations of the individual placing the ad that shared living arrangements apply to the property in question. Persons placing such advertisements, however, are responsible for satisfying the conditions for the exemption. Thus, an ad for a female roommate could result in liability for the person placing the ad if the housing being advertised is actually a separate dwelling unit without shared living spaces. See 24 CFR 109.20.

Similarly, Intake staff should not file a familial status complaint against a publisher of an advertisement if the advertisement indicates on its face that it is housing for older persons. While an owner-respondent may be held responsible for running an advertisement indicating an exclusion of families with children if his or her property does not meet the "housing for older persons" exemption, a publisher is entitled to rely on the owner's assurance that the property is exempt.

The following is policy guidance on certain advertising issues which have arisen recently. We are currently reviewing past guidance from this office and from the Office of General Counsel and will update our guidance as appropriate.

1. *Race, color, national origin*.—Real estate advertisements should state no discriminatory preference or limitation on account of race, color, or national origin. Use of words describing the housing, the current or potential residents, or the neighbors or neighborhood in racial or ethnic terms (i.e., white family home, no Irish) will create liability under this section.

However, advertisements which are facially neutral will not create liability. Thus, complaints over use of phrases such as master bedroom, rare find, or desirable neighborhood should not be filed.

2. *Religion*.—Advertisements should not contain an explicit preference, limitation or discrimination on account of religion (i.e., no Jews, Christian home). Advertisements which use the legal name of an entity which contains a religious reference (for example, Roselawn Catholic Home), or those which contain a religious symbol, (such as a cross), standing alone, may indicate a religious preference. However, if such an advertisement includes a disclaimer (such as the statement "This Home does not discriminate on the basis of race, color, religion, national origin, sex, handicap or familial status") it will not violate the Act. Advertisements containing descriptions of properties (apartment complex with chapel), or services (kosher meals available) do not on their face state a preference for persons likely to make use of those facilities, and are not violations of the Act.

The use of secularized terms or symbols relating to religious holidays such as Santa Claus, Easter Bunny, or St. Valentine's Day images, or phrases such as "Merry Christmas", "Happy Easter", or the like does not constitute a violation of the Act.

3. *Sex*.—Advertisements for single family dwellings or separate units in a multifamily dwelling should contain no explicit preference, limitation or discrimination based on sex. Use of the term master bedroom does not constitute a violation of either the sex discrimination provisions or the race discrimination provisions. Terms such as "mother-in-law suite" and "bachelor apartment" are commonly used as physical descriptions of housing units and do not violate the Act.

4. *Handicap*.—Real estate advertisements should not contain explicit exclusions, limitations, or other indications of discrimination based on handicap (i.e., no wheelchairs). Advertisements containing descriptions of properties (great view, fourth-floor walk-up, walk-in closets), services or facilities (jogging trails), or neighborhoods (walk to bus-stop) do not violate the Act. Advertisements describing the conduct required of residents ("non-smoking", "sober") do not violate the Act. Advertisements containing descriptions of accessibility features are lawful (wheelchair ramp).

5. *Familial status*.—Advertisements may not state an explicit preference, limitation or discrimination based on familial status. Advertisements may not contain limitations on the number or ages of children, or state a preference for adults, couples or singles. Advertisements describing the properties (two bedroom, cozy, family room), services and facilities (no bicycles allowed) or neighborhoods (quiet streets) are not facially discriminatory and do not violate the Act.

Please contact Sara K. Pratt, Director, Office of Investigations or Susan Forward, Deputy Assistant Secretary for Enforcement and Investigations, for further information.

SECTION 8 FAIR SHARE VOUCHERS

Question. Mr. Secretary, HUD recently published on March 10th the regulations that will govern the award of fair share vouchers. How do these requirements differ from how HUD used to award fair share vouchers?

Answer. In order to underscore the importance the Department places upon effective and efficient management of the Section 8 programs by Public Housing Authorities (PHA), the fiscal year 2000 Notice of Fund Availability (NOFA) established more stringent threshold requirements that PHAs with an existing program must meet in order to be eligible to submit an application. These threshold requirements are a prerequisite to a PHA reaching the review stage where its application would then be rated under the NOFA's rating criteria. Examples of the more stringent threshold requirements in fiscal year 2000 NOFA versus the "fair share" NOFA in 1994 include an increase in the required certificate and voucher lease-up rate from 85 percent to 90 percent, and automatic disqualification of the application if the applicant has been debarred. With this lone exception, the fiscal year 2000 NOFA, as amended on May 18, 2000, is substantially similar to the last "fair share" NOFA published in fiscal year 1994.

Question. How were these new regulations and requirements developed and what is the reason for any differences from prior requirements?

Answer. The more stringent threshold requirements imposed in this year's Notice of Fund Availability (NOFA) arise from the Department's continuing oversight and experience with the program, and concerns noted by both the Department and the Congress regarding the incidence of Public Housing Authority (PHA) program under-utilization. As noted above, the fiscal year 2000 NOFA closely adheres to the 1994 "fair share" NOFA.

Question. In particular, we understand that this new award formula has reduced the emphasis on "need" as a criteria for making an allocation of incremental vouchers. Were outside comments collected and considered, and if so, to what extent?

Answer. "Housing needs" in this year's Notice of Fund Availability (NOFA), as amended, are afforded the same weight as the fiscal year 1994 Fair Share NOFA. This weighting was increased in the May 18th NOFA amendment to parity with the 1994 NOFA as a result of comments received from Congressional representatives, Public Housing Authorities (PHA), and an organization representing PHAs.

Question. Also, please provide a chart of the proposed allocation under the new regulations as compared to the last 3 years in which the previous fair share requirements were used?

Answer. A comparison of the fiscal year 2000 fair share distribution with the most recent three fair share distributions is provided for your information as requested. During 1992–1994, the fair share funds were allocated to each of the field offices where the application review and selection process was conducted. Starting in fiscal year 1999, this process is centralized in the Grant Management Center and the available funds are now fair shared to the HUD State offices for suballocation.

SECTION 8 ALLOCATION

HUD Office	Fiscal years—			
	1992	1993	1994	2000
Boston, Massachusetts	$27,333,770	$40,283,741	$38,398,961	$12,456,208
Hartford, Connecticut	10,938,225	17,682,339	16,854,723	4,676,595
Manchester, New Hampshire	7,647,715	9,884,600	9,421,767	1,162,548
Providence, Rhode Island	3,126,325	5,516,955	5,258,799	1,753,494
Maine				1,304,156
Vermont				771,380
Buffalo, New York	14,343,710	22,050,566	21,018,739	
New York, New York	86,396,880	145,990,084	139,158,680	
New York				57,048,507
Newark, New Jersey	28,872,470	49,116,756	39,029,408	12,981,233
Delaware				663,416
Baltimore, Maryland	8,700,130	14,246,528	13,579,882	
Maryland/D.C				7,250,808
Charleston, West Virginia	3,435,150	4,326,916	4,124,446	1,430,622
Philadelphia, Pennsylvania	19,425,085	31,952,008	30,456,864	

SECTION 8 ALLOCATION—Continued

HUD Office	Fiscal years—			
	1992	1993	1994	2000
Pittsburgh, Pennsylvania	7,605,025	11,758,164	11,207,956	.....
Richmond, Virginia	8,576,665	12,563,658	11,975,758	5,404,073
Washington D.C	12,574,955	21,298,947	20,302,293	.....
Pennsylvania	.....	.....	.....	14,791,053
Atlanta, Georgia	12,132,235	17,512,207	10,092,747	6,522,548
Birmingham, Alabama	6,259,470	9,179,087	8,749,565	2,998,660
Carribean Office	5,509,880	8,295,312	7,907,138	2,902,466
Columbia, South Carolina	4,925,230	6,918,479	6,594,738	2,713,819
Greensboro, North Carolina	10,164,280	13,979,053	13,324,927	5,908,423
Jackson, Mississippi	4,661,515	5,500,811	5,243,399	1,894,043
Jacksonville, Florida	22,061,785	38,059,737	36,278,784	13,396,457
Louisville, Kentucky	6,341,045	8,455,756	8,060,077	3,003,250
Knoxville, Tennessee	2,716,360	4,053,689	3,864,000	.....
Nashville, Tennessee	5,352,405	8,043,878	7,032,006	.....
Tennessee	.....	.....	.....	4,026,565
Chicago, Illinois	34,212,580	55,942,844	53,325,075	16,635,009
Cincinnati, Ohio	5,014,945	7,904,856	7,534,960	.....
Cleveland, Ohio	9,732,400	15,677,798	14,944,178	.....
Columbus, Ohio	4,975,880	7,313,556	6,970,378	.....
Ohio	.....	.....	.....	12,346,480
Detroit, Michigan	11,335,885	18,362,838	17,503,578	10,673,680
Grand Rapids, Michigan	5,158,135	7,313,277	6,970,492	.....
Indianapolis, Indiana	8,099,740	12,258,621	11,684,997	4,820,548
Milwaukee, Wisconsin	8,486,820	14,522,144	13,842,595	6,178,218
Minneapolis, Minnesota	8,513,845	12,870,342	12,268,096	4,248,602
North Dakota	.....	.....	.....	584,150
South Dakota	.....	.....	.....	729,568
Fort Worth, Texas	15,355,330	23,459,608	21,273,603	.....
Houston, Texas	7,503,520	12,426,209	11,844,738	.....
Little Rock, Arkansas	3,868,995	4,933,989	4,703,102	1,685,154
New Orleans, Louisiana	8,961,110	12,649,543	12,057,626	4,117,360
Oklahoma City, Oklahoma	4,694,415	6,161,940	5,873,603	2,370,698
San Antonio, Texas	7,390,955	11,234,597	9,295,150	.....
New Mexico	.....	.....	.....	1,276,507
Texas	.....	.....	.....	18,465,474
Des Moines, Iowa	5,059,970	6,598,054	6,289,307	2,636,009
Kansas City, Missouri	6,888,030	10,124,217	9,650,470	4,419,025
Omaha, Nebraska	2,615,555	3,513,222	3,348,910	1,509,926
St. Louis, Missouri	5,250,360	7,750,766	7,388,082	.....
Idaho	.....	.....	.....	790,875
Kansas	.....	.....	.....	1,964,068
Montana	.....	.....	.....	799,469
Wyoming	.....	.....	.....	349,048
Denver, Colorado	13,553,495	19,152,407	18,255,790	4,344,651
Utah	.....	.....	.....	1,525,394
Honolulu, Hawaii	5,246,810	8,137,064	7,756,300	2,395,085
Los Angeles, California	76,242,830	119,271,894	121,397,995	59,653,051
Phoenix, Arizona	5,440,360	7,500,192	7,149,233	3,891,871
Sacramento, California	5,417,265	8,687,681	8,281,153	.....
San Francisco, California	38,790,070	64,197,064	61,193,051	.....
Nevada	.....	.....	.....	1,611,636
Anchorage, Alaska	1,107,395	1,520,386	1,449,244	.....
Portland, Oregon	9,281,635	12,953,101	12,346,978	4,050,157
Seattle, Washington	10,373,565	15,974,473	15,226,969	7,431,525
Total	647,672,205	1,015,081,954	957,761,310	346,563,562

INCREASED HUD INVENTORY OF SINGLE FAMILY FORECLOSED PROPERTY

Question. While the FHA Mutual Mortgage Insurance Fund is presently in good financial condition, FHA's inventory of single family homes that HUD has foreclosed on and taken ownership of has more than doubled under your tenure from 24,395 homes in 1996 to over 47,000 homes currently, despite the fact that this sub-

committee has provided significant new tools, including a Single Family Property Disposition program as part of the VA/HUD fiscal year 1999 Bill, to move this housing into the hands of non-profits and homeowner.

Answer. HUD has in fact reduced the rate at which it acquires foreclosed properties (a 7 percent decline over last fiscal year). This drop reflects both an improved economy, enhancements to the Department's underwriting standards, and the very positive effect of HUD's explosive loss mitigation program, which supports foreclosure avoidance actions by borrowers and lenders.

There is no doubt that poor housing market conditions in the late-1990s adversely impacted many homeowners, especially the lower income families which FHA serves. The increase in defaults, foreclosures and new HUD home acquisitions in the late-1990s was similar to a trend in the late-1980s, when HUD's inventory of foreclosed homes increased from 26,000 in 1985 to 54,000 in 1989. What has differed is the effectiveness of HUD's response in addressing both individual and community needs.

New property disposition tools are designed to use private sector skills to improve disposition approaches once properties are acquired. Remarkably, under HUD's new Management and Marketing (M&M) strategy this recent growth in the portfolio due to higher acquisition rates has been swiftly addressed, and through August 2000 the Department had reduced its inventory to 35,000 homes. A similar reduction in inventory in the early 1990s took 2½ years to accomplish, while the same reduction was realized in nearly half the time thanks to HUD reform measures.

While accomplishing this inventory reduction, HUD has been careful to meet its fiscal responsibilities and employ Congressional authorizations for community reinvestment. The Department invests an average of $10,000 per property in holding costs over a 5-month period—it's average time in inventory. In the first 6 months of fiscal year 2000, HUD recovered 65 percent of the insurance claim paid to acquire a property. Through PD Reform measures, recoveries on claims paid have increased an average of $4,000 per property over the prior 12-month period. As the portfolio of HUD-held properties declines, the Department has made inroads in disposing of its hard-to-sell properties, reducing its homes in inventory for more than 6 months by 12 percent.

Question. Why the big increase in foreclosures and why has HUD failed to implement effectively the Single family Property Disposition program?

Answer. The surge in foreclosures which was experienced last year resulted to a great degree from a loss of home equity in certain parts of the country, most notably southern California and the New England states. The Department provides a broad safety net to help more homeowners avoid foreclosures, even in less than favorable market conditions. Further, the Department has employed new tools and new approaches to dramatically reduce the inventory of HUD-held homes.

FHA has taken steps to tighten lax underwriting standards existing prior to 1996, most particularly regarding adjustable rate mortgages. The Department is now beginning to realize the benefits of this change, as default and foreclosure rates decline. Further, the success of FHA's loss mitigation program has been proven by the ability this program has had in avoiding foreclosures and helping to keep homeowners in their homes. During fiscal year 1999, FHA paid over 26,000 loss mitigation claims, nearly 2½ times the number paid in the previous fiscal year. Through August 2000, fiscal year to date loss mitigation activity has increased by 35 percent, and the number of foreclosure avoidance actions is expected to exceed 35,000 for fiscal year 2000. Over 85 percent of all of FHA loss mitigation actions not only help homeowners avoid foreclosure, it enables them to remain in their home while these families work to overcome the financial difficulty which caused them to default on their mortgage.

HOLDING PERIOD FOR HUD-OWNED HOUSING

Question. Mr. Secretary, it is very troubling that from between April 1999 and January 31, 2000, the percentage of properties in HUD's single family inventory for 6 months or more has increased from 30 percent to 41 percent of the inventory, and the percentage of properties in the inventory for more than 12 months has increased from 10 percent to 17 percent.

This HUD failure is a disaster for neighborhoods. In particular, when the Federal government steps in to take over a property from a failing landlord, or becomes the owner of a house down the street through foreclosure, we expect that through foreclosure, we expect that things will start to improve; that repairs will be made, lawns mowed, and broken windows fixed. What we don't expect is that the housing conditions will deteriorate even further, that property values will fall in the neighborhood, and that in some instances the property will become a HUD-owned crack

house. It is this failure to maintain and dispose of its foreclosed inventory in the 1980s on the part of HUD that destroyed a number of neighborhoods throughout the country—a number of these neighborhoods remain distressed even today. I also know that you saw examples of these failures at the field hearing in Baltimore on Monday.

What is the average cost to the Federal government to hold a property for 6 months? What is the average cost to the Federal government to hold a property for a year? What was the total in holding cost for each of fiscal years 1997, 1998, 1999 and the first half of 2000?

What is the average loss in value to a house that is held by HUD foreclosed properties to local jurisdictions. While it sounds good, it looks like HUD is merely clearing its books while passing on troubled properties to jurisdictions. Why can't HUD take care of its own responsibilities and problems?

Answer. As stated above, the time a property is held in HUD's inventory has decreased by 13 percent over the past 12 months. Of HUD's current inventory, 49 percent is currently under a sales contract. In May 2000, HUD acquired 5,164 properties and placed 10,481 under a sales contract. The appraised value of HUD homes has increased by 12 percent from the previous year, with a net recovery rate increase of 4.6 percent. The value the real estate market places on HUD homes is the best indicator of overall improvements in the condition of HUD homes. These homes are often in poor condition when HUD acquires them, but aggressive maintenance and repair efforts under PD Reform are helping to swiftly transform the tragedy of foreclosure into the opportunity of homeownership.

To accomplish this objective FHA invests an average of $10,267 per property in holding costs over a 5-month period—it's average time in inventory. FHA currently recovers 65 percent of the insurance claim paid to acquire a property. Through PD Reform measures, recoveries on claims paid have increased an average of $4,000 per property over the prior 12-month period.

Before FHA dramatically reduces prices on its hard-to-sell properties, it wants to offer a partnership with local governments in transforming a house acquired from the tragedy of foreclosure into a home and a community asset. Local governments are better positioned to ensure that communities not only find a new neighbor to occupy a vacant home, but a good neighbor. This can mean specific uses for homes such as community centers, or police sub-stations, or rehabilitated properties consistent with local standards. If local governments are not interested in purchasing a house because of its poor condition, FHA will also consider demolishing the home, and offer the land to local governments, for use as parkland or to meet similar community needs. FHA estimates that sales to local governments will make of 1 percent of its overall sales. An estimate of 10 percent of HUD home sales will fall into the Good Neighbor program, 1 percent of which is estimated to go to local governments.

FHA SINGLE FAMILY FORECLOSURE RATES

Question. Mr. Secretary, the percent of FHA loans in foreclosure has increased from 1.64 percent in 1996 to 2.2 percent in 1999. FHA's loan delinquencies has also increased from 8.05 percent in 1996 to 8.57 percent in 1999, whereas the delinquency rate for conventional loans is some 2.63 percent. Why are these delinquency and default rates so high? What is HUD doing to lower them?

Answer. The FHA claim rate is quite lower than the 2.2 that is often cited. The rate has remained relatively unchanged at approximately 1.1 percent over the last 2 years, according to information from the Mortgage Bankers Association.

The figure of 8.57 percent rate reflects a 30-day rate. Most independent industry analysts focus primarily on 90-day defaults in evaluating performance. Independent analysts of FHA activity focus on the more serious 90-day default figures, which indicate a default rate of between 3 and 3.5 percent over the last several years. FHA's default rate has been steadily declining during this entire fiscal year—as of April 30, the default rate stood at 3.3 percent. That equals a 4 percent reduction from 1 year ago, when the rate stood at 3.46 percent.

Question. In addition, I have a huge concern that we are in a policy mode of putting families in homes without regard to whether they can afford to maintain the home. Isn't it likely that we are going to see a lot of families lose their homes if there is a downturn in the economy, and that this will destroy the credit of these families? What policies does HUD have in place to address this potential set of problems?

Answer. HUD seriously considers the likelihood of a person's ability to maintain a home when someone applies for an FHA loan. The criteria are fairly straightforward but serve as qualifications or indicators. They are: having the income HUD believes to be necessary to support the mortgage payment and pay other obligations;

having an acceptable (if not perfect) credit history that indicates a willingness to repay obligations. A downpayment of at least 3 percent of the sales price is also considered a sign of the ability to maintain the household.

It is difficult to speculate about a possible economic downturn, but there are loss mitigation tools that can assist a mortgage holder who may have difficulty making payments. These tools are designed for lenders to use to maintain ownership when families have a change of circumstance. There are three tools that are particularly helpful for a family that is trying to avoid foreclosure while retaining possession of their home. They are:

—*Special forbearance*.—Written repayment agreement between a lender and a mortgagor which contains a plan to reinstate a loan that has been delinquent—FHA reduced its minimum delinquency requirement from 4 months to 90 days to make this option more attractive for lenders. This option provides the family the chance to repay the money owed while allowing the borrower to recover from the cause of the default.

—*Loan modification*.—A permanent change in one or more of the terms of a borrower's loan which, if made, allows the loan to be reinstated and results in payment the borrower can afford. Modifications may include a change in the interest rate; capitalization of delinquent principal, interest or escrow items; extension of time available to repay the loan; and/or re-amortization of the balance due.

—*Partial claim*.—A lender will advance funds on behalf of a borrower in an amount necessary to reinstate a delinquent loan(not to exceed the equivalent of 12 months PITI). The borrower, upon acceptance of the advance, will execute a promissory note and subordinate mortgage payable to HUD.

There are two options for the family that is unable to use the three tools described above, but who is looking for an option less harmful to its credit rating than a foreclosure. The first of these is the pre-foreclosure sale, which allows a borrower in default to sell his or her home and use the sale proceeds to satisfy the mortgage debt even if the proceeds are less than the amount owed. This option is appropriate for borrowers whose financial situation requires that they sell their home, but who are unable to sell without FHA relief, because the value of the property has declined to less than the amount owed on the mortgage.

Borrowers must make a commitment to actively market their property for a period of 4-to-6 months, during which time the lender delays foreclosure action. Owner-occupant borrowers who successfully sell to a third party within the required time, are paid a cash consideration up to $1,000. Lenders also receive a $1,000 incentive for successfully avoiding the foreclosure. Since the pre-foreclosure sale was introduced in 1994, it has helped thousands of borrowers in default avoid foreclosure and make a smooth transition to more affordable housing.

If the property does not sell, borrowers are encouraged to convey the property to FHA through a deed-in-lieu of foreclosure. Deed-in-lieu of foreclosure (DIL) is a disposition option in which a borrower voluntarily deeds collateral property to HUD in exchange for a release from all obligations under the mortgage. Though this option results in the borrower losing the property, it is usually preferable to foreclosure because the borrower mitigates the cost and emotional trauma of foreclosure and is eligible to receive borrower's consideration of $500. Also, a DIL is generally less damaging than foreclosure to a borrower's ability to obtain credit in the future. DIL is preferred by HUD because it avoids the time and expense of a legal foreclosure action, and due to the cooperative nature of the transaction, the property is generally in better physical condition at acquisition.

FHA STAFF

Question. Please identify the HUD staff assigned to the FHA single family and multifamily housing programs by program, function and salary for fiscal years 1992 through 2000. Please identify all contracts, including individual contractors, for activities under the FHA single family and multifamily housing programs by program, activity and cost for fiscal years 1992 through 2000. Please identify all contracts that were not competitively bid during this period.

Answer. The Department has assembled payroll and contract data in response to this request which will be transmitted to the Committee.

REPORT: BWHSGFAM RUN DATE 06/01/00 P.P. END: 05/20/2000
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-04	ATLANTA	12,955,656.00	4,353,907.00	17,309,563.00
	BRMNGHAM	.	1,496,023.00	1,496,023.00
	COLUMBIA	.	1,748,464.00	1,748,464.00
	CORAL GB	.	553,755.00	553,755.00
	GREENSBR	58,494.00	3,473,439.00	3,531,933.00
	JACKSNVL	.	3,448,704.00	3,448,704.00
	JACKSON	.	1,318,728.00	1,318,728.00
	KNOXVLLE	.	997,376.00	997,376.00
	LOUISVL	.	1,332,973.00	1,332,973.00
	NASHVLLE	.	1,679,532.00	1,679,532.00
	PRT RICO	.	886,258.00	886,258.00
*TOTAL	RG-04	13,014,150.00	21,289,159.00	34,303,309.00
RG-05	CHICAGO	.	4,849,190.00	4,849,190.00
	CLEVELND	.	2,317,440.00	2,317,440.00
	COLUMBUS	.	3,264,330.00	3,264,330.00
	DETROIT	.	3,704,706.00	3,704,706.00
	INDNAPLS	.	1,691,335.00	1,691,335.00
	MIN-STPL	.	2,273,413.00	2,273,413.00
	MLWAUKEE	.	1,832,643.00	1,832,643.00
*TOTAL	RG-05	.00	19,933,057.00	19,933,057.00

REPORT: BWHSGFAM RUN DATE 06/01/00 P.P. END: 05/20/2000
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-06	ALBQRQUE	.	325,466.00	325,466.00
	FT WORTH	.	4,452,740.00	4,452,740.00
	HOUSTON	.	1,996,430.00	1,996,430.00
	LTL ROCK	.	1,069,881.00	1,069,881.00
	NEW ORLN	.	1,709,049.00	1,709,049.00
	OKLA CTY	77,501.00	1,426,738.00	1,504,239.00
	SN ANTON	.	1,853,315.00	1,853,315.00
*TOTAL	RG-06	77,501.00	12,833,619.00	12,911,120.00
RG-07	DES MOIN	.	779,036.00	779,036.00
	KAN CITY	.	2,244,031.00	2,244,031.00
	OMAHA	.	818,207.00	818,207.00
	ST LOUIS	.	1,012,104.00	1,012,104.00
*TOTAL	RG-07	.00	4,853,378.00	4,853,378.00
RG-08	DENVER	15,542,798.00	3,701,272.00	19,244,070.00
RG-09	HONOLULU	.	461,390.00	461,390.00
	L. A.	.	3,620,326.00	3,620,326.00
	LAS VGAS	.	335,352.00	335,352.00
	PHOENIX	.	1,308,844.00	1,308,844.00

REPORT: BWHSGFAM RUN DATE 06/01/00 P.P. END: 05/20/2000
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-09	SAN FRAN	.	4,579,980.00	4,579,980.00
	SNTA ANA	10,020,429.00	.	10,020,429.00
*TOTAL	RG-09	10,020,429.00	10,305,892.00	20,326,321.00
RG-10	ANCHRAGE	.	214,425.00	214,425.00
	PORTLAND	.	1,030,284.00	1,030,284.00
	SEATTLE	.	2,116,537.00	2,116,537.00
*TOTAL	RG-10	.00	3,361,246.00	3,361,246.00
TOTAL		58,540,691.00	107,976,035.00	166,516,726.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/25/1999 (FY 1999)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
HQ	HOUSING	7,531,842.00	6,858,637.00	14,390,479.00
RG-01	BOSTON	.	2,928,518.00	2,928,518.00
	HARTFORD	.	1,301,796.00	1,301,796.00
	MANCHSTR	.	1,068,881.00	1,068,881.00
	PROVIDNC	.	562,785.00	562,785.00
*TOTAL RG_ID RG-01		.00	5,861,980.00	5,861,980.00
RG-02	BUFFALO	.	2,009,485.00	2,009,485.00
	NEW YORK	.	4,713,560.00	4,713,560.00
	NEWARK	.	1,532,565.00	1,532,565.00
*TOTAL RG_ID RG-02		.00	8,255,610.00	8,255,610.00
RG-03	BALTIMOR	53,676.00	1,710,364.00	1,764,040.00
	CHARLSTN	.	523,524.00	523,524.00
	PHILA	11,353,563.00	1,685,053.00	13,038,616.00
	PITTSBRG	.	1,364,414.00	1,364,414.00
	RICHMOND	.	1,462,515.00	1,462,515.00
	WASH DC	60,183.00	1,430,774.00	1,490,957.00
*TOTAL RG_ID RG-03		11,467,422.00	8,176,644.00	19,644,066.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/25/1999 (FY 1999)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-04	ATLANTA	12,285,890.00	3,744,270.00	16,030,160.00
	BRMNGHAM	.	1,475,011.00	1,475,011.00
	COLUMBIA	.	1,683,127.00	1,683,127.00
	CORAL GB	.	461,442.00	461,442.00
	GREENSBR	52,681.00	3,231,302.00	3,283,983.00
	JACKSNVL	.	3,357,145.00	3,357,145.00
	JACKSON	.	1,147,800.00	1,147,800.00
	KNOXVLLE	.	778,825.00	778,825.00
	LOUISVL	.	1,308,038.00	1,308,038.00
	NASHVLLE	.	1,614,590.00	1,614,590.00
	PRT RICO	.	868,073.00	868,073.00
*TOTAL RG_ID RG-04		12,338,571.00	19,669,623.00	32,008,194.00
RG-05	CHICAGO	.	5,838,616.00	5,838,616.00
	CLEVELND	.	2,197,363.00	2,197,363.00
	COLUMBUS	.	2,940,859.00	2,940,859.00
	DETROIT	.	3,587,765.00	3,587,765.00
	INDNAPLS	.	1,727,958.00	1,727,958.00
	MIN-STPL	.	2,041,440.00	2,041,440.00
	MLWAUKEE	.	1,623,092.00	1,623,092.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/25/1999 (FY 1999)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
*TOTAL RG_ID RG-05		.00	19,957,093.00	19,957,093.00
RG-06	ALBQRQUE	.	307,887.00	307,887.00
	FT WORTH	58,339.00	3,929,519.00	3,987,858.00
	HOUSTON	.	1,893,558.00	1,893,558.00
	LTL ROCK	.	1,001,386.00	1,001,386.00
	NEW ORLN	.	1,642,277.00	1,642,277.00
	OKLA CTY	74,029.00	1,378,461.00	1,452,490.00
	SN ANTON	.	1,672,766.00	1,672,766.00
*TOTAL RG_ID RG-06		132,368.00	11,825,854.00	11,958,222.00
RG-07	DES MOIN	.	855,879.00	855,879.00
	KAN CITY	.	2,168,734.00	2,168,734.00
	OMAHA	.	696,615.00	696,615.00
	ST LOUIS	.	892,503.00	892,503.00
*TOTAL RG_ID RG-07		.00	4,613,731.00	4,613,731.00
RG-08	DENVER	15,465,894.00	3,439,560.00	18,905,454.00
RG-09	HONOLULU	.	385,622.00	385,622.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/25/1999 (FY 1999)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-09	L. A.	.	3,716,839.00	3,716,839.00
	LAS VGAS	.	293,603.00	293,603.00
	PHOENIX	.	1,208,925.00	1,208,925.00
	SAN FRAN	.	3,984,577.00	3,984,577.00
	SNTA ANA	9,798,414.00	.	9,798,414.00
*TOTAL RG_ID RG-09		9,798,414.00	9,589,566.00	19,387,980.00
RG-10	ANCHRAGE	.	205,072.00	205,072.00
	PORTLAND	.	1,004,287.00	1,004,287.00
	SEATTLE	.	1,863,688.00	1,863,688.00
*TOTAL RG_ID RG-10		.00	3,073,047.00	3,073,047.00
*TOTAL FISCAL_YEAR 1999		56,734,511.00	101,321,345.00	158,055,856.00
TOTAL		390,171,423.00	508,923,794.00	899,095,217.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/26/1998 (FY 1998)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
HQ	HOUSING	6,968,424.00	7,203,597.00	14,172,021.00
RG-01	BOSTON	.	3,220,916.00	3,220,916.00
	HARTFORD	92,623.00	1,484,014.00	1,576,637.00
	MANCHSTR	41,086.00	924,865.00	965,951.00
	PROVIDNC	49,339.00	598,685.00	648,024.00
*TOTAL RG_ID RG-01		183,048.00	6,228,480.00	6,411,528.00
RG-02	BUFFALO	.	1,934,381.00	1,934,381.00
	CAMDEN	29,293.00	.	29,293.00
	NEW YORK	25,297.00	4,711,435.00	4,736,732.00
	NEWARK	.	1,891,377.00	1,891,377.00
*TOTAL RG_ID RG-02		54,590.00	8,537,193.00	8,591,783.00
RG-03	BALTIMOR	50,205.00	1,731,575.00	1,781,780.00
	CHARLSTN	.	501,732.00	501,732.00
	PHILA	10,830,571.00	1,239,556.00	12,070,127.00
	PITTSBRG	72,039.00	1,419,304.00	1,491,343.00
	RICHMOND	.	1,255,299.00	1,255,299.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/26/1998 (FY 1998)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-03	WASH DC	202,386.00	1,539,471.00	1,741,857.00
*TOTAL RG_ID RG-03		11,155,201.00	7,686,937.00	18,842,138.00
RG-04	ATLANTA	11,321,139.00	3,381,350.00	14,702,489.00
	BRMNGHAM	84,649.00	1,413,694.00	1,498,343.00
	COLUMBIA	.	1,588,383.00	1,588,383.00
	CORAL GB	179,271.00	503,625.00	682,896.00
	GREENSBR	154,186.00	3,108,475.00	3,262,661.00
	JACKSNVL	120,093.00	3,086,733.00	3,206,826.00
	JACKSON	56,837.00	1,194,679.00	1,251,516.00
	KNOXVLLE	.	864,857.00	864,857.00
	LOUISVL	.	1,261,553.00	1,261,553.00
	MEMPHIS	58,670.00	.	58,670.00
	NASHVLLE	56,837.00	1,700,383.00	1,757,220.00
	PRT RICO	49,728.00	840,594.00	890,322.00
	TAMPA	133,840.00	.	133,840.00
*TOTAL RG_ID RG-04		12,215,250.00	18,944,326.00	31,159,576.00
RG-05	CHICAGO	88,593.00	6,914,401.00	7,002,994.00
	CLEVELND	28,057.00	2,040,777.00	2,068,834.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/26/1998 (FY 1998)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-05	CNCINATI	56,199.00	127,036.00	183,235.00
	COLUMBUS	.	2,672,743.00	2,672,743.00
	DETROIT	57,060.00	3,304,723.00	3,361,783.00
	INDNAPLS	55,114.00	1,714,409.00	1,769,523.00
	MIN-STPL	31,850.00	1,964,379.00	1,996,229.00
	MLWAUKEE	.	1,645,451.00	1,645,451.00
*TOTAL RG_ID RG-05		316,873.00	20,383,919.00	20,700,792.00
RG-06	ALBQRQUE	50,881.00	277,551.00	328,432.00
	DALLAS	51,595.00	.	51,595.00
	FT WORTH	287,810.00	3,619,717.00	3,907,527.00
	HOUSTON	62,310.00	1,789,092.00	1,851,402.00
	LTL ROCK	91,791.00	1,087,988.00	1,179,779.00
	LUBBOCK	27,375.00	.	27,375.00
	NEW ORLN	.	1,688,503.00	1,688,503.00
	OKLA CTY	69,331.00	1,256,380.00	1,325,711.00
	SHRVPORT	57,050.00	.	57,050.00
	SN ANTON	.	1,506,270.00	1,506,270.00
*TOTAL RG_ID RG-06		698,143.00	11,225,501.00	11,923,644.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/26/1998 (FY 1998)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-07	DES MOIN	.	797,136.00	797,136.00
	KAN CITY	125,222.00	2,584,049.00	2,709,271.00
	OMAHA	.	692,524.00	692,524.00
	ST LOUIS	.	1,011,842.00	1,011,842.00
*TOTAL RG_ID RG-07		125,222.00	5,085,551.00	5,210,773.00
RG-08	DENVER	15,328,666.00	3,555,068.00	18,883,734.00
	HELENA	52,423.00	.	52,423.00
*TOTAL RG_ID RG-08		15,381,089.00	3,555,068.00	18,936,157.00
RG-09	HONOLULU	24,631.00	411,920.00	436,551.00
	L. A.	33,647.00	3,920,848.00	3,954,495.00
	LAS VGAS	.	243,636.00	243,636.00
	PHOENIX	31,287.00	1,134,748.00	1,166,035.00
	SACRMNTO	.	79,899.00	79,899.00
	SAN FRAN	.	4,116,534.00	4,116,534.00
	SNTA ANA	8,696,762.00	.	8,696,762.00
*TOTAL RG_ID RG-09		8,786,327.00	9,907,585.00	18,693,912.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/26/1998 (FY 1998)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-10	ANCHRAGE	.	195,986.00	195,986.00
	PORTLAND	19,128.00	1,156,612.00	1,175,740.00
	SEATTLE	61,606.00	1,904,585.00	1,966,191.00
*TOTAL RG_ID RG-10		80,734.00	3,257,183.00	3,337,917.00
*TOTAL FISCAL_YEAR 1998		55,964,901.00	102,015,340.00	157,980,241.00

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
HQ	HOUSING	10,270,062.00	9,905,419.00	20,175,481.00
RG-01	BANGOR	75,826.00	.	75,826.00
	BOSTON	542,247.00	3,043,919.00	3,586,166.00
	BURLGTN	49,449.00	.	49,449.00
	HARTFORD	637,122.00	1,431,371.00	2,068,493.00
	MANCHSTR	305,277.00	727,606.00	1,032,883.00
	PROVIDNC	221,376.00	761,683.00	983,059.00
*TOTAL RG_ID RG-01		1,831,297.00	5,964,579.00	7,795,876.00
RG-02	ALBANY	1,024,928.00	.	1,024,928.00
	BUFFALO	807,690.00	1,710,157.00	2,517,847.00
	CAMDEN	907,227.00	.	907,227.00
	NEW YORK	1,063,986.00	4,398,822.00	5,462,808.00
	NEWARK	729,520.00	1,908,878.00	2,638,398.00
*TOTAL RG_ID RG-02		4,533,351.00	8,017,857.00	12,551,208.00
RG-03	BALTIMOR	1,245,257.00	1,773,615.00	3,018,872.00
	CHARLSTN	253,903.00	400,046.00	653,949.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/27/1997 (FY 1997)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-03	PHILA	3,145,903.00	1,604,692.00	4,750,595.00
	PITTSBRG	667,153.00	1,390,389.00	2,057,542.00
	RICHMOND	1,601,947.00	1,809,585.00	3,411,532.00
	WASH DC	1,699,890.00	1,604,570.00	3,304,460.00
	WILMNGTN	115,036.00	.	115,036.00
*TOTAL RG_ID RG-03		8,729,089.00	8,582,897.00	17,311,986.00
RG-04	ATLANTA	3,315,600.00	3,611,601.00	6,927,201.00
	BRMNGHAM	656,407.00	1,537,960.00	2,194,367.00
	COLUMBIA	1,314,397.00	1,482,754.00	2,797,151.00
	CORAL GB	1,536,556.00	.	1,536,556.00
	GREENSBR	1,136,425.00	3,034,549.00	4,170,974.00
	JACKSNVL	466,058.00	2,976,856.00	3,442,914.00
	JACKSON	746,624.00	1,117,863.00	1,864,487.00
	KNOXVLLE	683,316.00	928,332.00	1,611,648.00
	LOUISVL	522,969.00	1,419,846.00	1,942,815.00
	MEMPHIS	1,354,328.00	.	1,354,328.00
	NASHVLLE	1,044,482.00	1,216,340.00	2,260,822.00
	ORLANDO	881,451.00	.	881,451.00
	PRT RICO	590,351.00	709,922.00	1,300,273.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/27/1997 (FY 1997)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-04	TAMPA	1,243,077.00	.	1,243,077.00
*TOTAL RG_ID RG-04		15,492,041.00	18,036,023.00	33,528,064.00
RG-05	CHICAGO	3,873,117.00	3,366,242.00	7,239,359.00
	CLEVELND	1,503,926.00	2,333,066.00	3,836,992.00
	CNCINATI	571,543.00	841,076.00	1,412,619.00
	COLUMBUS	449,185.00	1,913,898.00	2,363,083.00
	DETROIT	1,756,971.00	1,709,284.00	3,466,255.00
	FLINT	209,515.00	.	209,515.00
	GRND RPD	482,103.00	692,964.00	1,175,067.00
	INDNAPLS	1,430,702.00	1,735,352.00	3,166,054.00
	MIN-STPL	1,266,480.00	1,867,377.00	3,133,857.00
	MLWAUKEE	730,259.00	1,401,918.00	2,132,177.00
*TOTAL RG_ID RG-05		12,273,801.00	15,861,177.00	28,134,978.00
RG-06	ALBQRQUE	336,493.00	237,147.00	573,640.00
	DALLAS	421,557.00	644,005.00	1,065,562.00
	FT WORTH	2,790,751.00	2,332,903.00	5,123,654.00
	HOUSTON	1,371,373.00	1,788,369.00	3,159,742.00
	LTL ROCK	873,680.00	1,010,344.00	1,884,024.00

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-06	LUBBOCK	682,085.00	.	682,085.00
	NEW ORLN	1,180,165.00	1,204,774.00	2,384,939.00
	OKLA CTY	908,670.00	1,366,601.00	2,275,271.00
	SHRVPORT	626,707.00	215,140.00	841,847.00
	SN ANTON	1,356,551.00	1,554,942.00	2,911,493.00
	TULSA	1,134,224.00	.	1,134,224.00
*TOTAL RG_ID RG-06		11,682,256.00	10,354,225.00	22,036,481.00
RG-07	DES MOIN	533,604.00	851,373.00	1,384,977.00
	KAN CITY	1,045,999.00	2,823,410.00	3,869,409.00
	OMAHA	449,282.00	617,629.00	1,066,911.00
	ST LOUIS	695,633.00	1,096,283.00	1,791,916.00
*TOTAL RG_ID RG-07		2,724,518.00	5,388,695.00	8,113,213.00
RG-08	CASPER	148,668.00	.	148,668.00
	DENVER	5,573,488.00	3,453,612.00	9,027,100.00
	FARGO	238,492.00	.	238,492.00
	HELENA	293,455.00	.	293,455.00
	SIOUX FL	154,089.00	.	154,089.00
	SLT LAKE	941,123.00	.	941,123.00

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
*TOTAL RG_ID RG-08		7,349,315.00	3,453,612.00	10,802,927.00
RG-09	FRESNO	907,192.00	.	907,192.00
	HONOLULU	367,641.00	407,215.00	774,856.00
	L. A.	1,355,978.00	3,463,014.00	4,818,992.00
	LAS VGAS	606,127.00	274,145.00	880,272.00
	PHOENIX	1,549,734.00	1,185,741.00	2,735,475.00
	RENO	196,298.00	.	196,298.00
	SACRMNTO	480,417.00	969,109.00	1,449,526.00
	SAN DIEG	336,454.00	527,488.00	863,942.00
	SAN FRAN	658,277.00	3,061,641.00	3,719,918.00
	SNTA ANA	1,826,578.00	.	1,826,578.00
	TUSCON	363,064.00	.	363,064.00
*TOTAL RG_ID RG-09		8,647,760.00	9,888,353.00	18,536,113.00
RG-10	ANCHRAGE	168,766.00	246,490.00	415,256.00
	BOISE	541,211.00	.	541,211.00
	PORTLAND	458,396.00	1,294,025.00	1,752,421.00
	SEATTLE	769,801.00	2,086,637.00	2,856,438.00
	SPOKANE	130,616.00	.	130,616.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/27/1997 (FY 1997)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
*TOTAL RG_ID RG-10	2,068,790.00	3,627,152.00	5,695,942.00
*TOTAL FISCAL_YEAR 1997	85,602,280.00	99,079,989.00	184,682,269.00

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
HQ	HOUSING	11,696,950.00	9,767,140.00	21,464,090.00
RG-01	BANGOR	71,364.00	.	71,364.00
	BOSTON	798,923.00	3,102,989.00	3,901,912.00
	BURLGTN	48,025.00	.	48,025.00
	HARTFORD	832,486.00	1,394,851.00	2,227,337.00
	MANCHSTR	373,565.00	744,199.00	1,117,764.00
	PROVIDNC	265,890.00	1,015,326.00	1,281,216.00
*TOTAL RG_ID RG-01		2,390,253.00	6,257,365.00	8,647,618.00
RG-02	ALBANY	1,063,721.00	.	1,063,721.00
	BUFFALO	925,671.00	1,650,465.00	2,576,136.00
	CAMDEN	970,854.00	.	970,854.00
	NEW YORK	1,052,679.00	4,854,406.00	5,907,085.00
	NEWARK	709,632.00	1,985,383.00	2,695,015.00
*TOTAL RG_ID RG-02		4,722,557.00	8,490,254.00	13,212,811.00
RG-03	BALTIMOR	1,576,287.00	1,668,860.00	3,245,147.00
	CHARLSTN	238,964.00	379,444.00	618,408.00

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-03	PHILA	2,894,998.00	1,961,075.00	4,856,073.00
	PITTSBRG	810,439.00	1,446,600.00	2,257,039.00
	RICHMOND	1,719,229.00	1,714,829.00	3,434,058.00
	WASH DC	1,642,190.00	1,708,903.00	3,351,093.00
	WILMNGTN	110,560.00	.	110,560.00
*TOTAL RG_ID RG-03		8,992,667.00	8,879,711.00	17,872,378.00
RG-04	ATLANTA	3,026,184.00	3,478,758.00	6,504,942.00
	BRMNGHAM	1,366,432.00	1,565,279.00	2,931,711.00
	COLUMBIA	1,237,660.00	1,419,922.00	2,657,582.00
	CORAL GB	2,064,057.00	.	2,064,057.00
	GREENSBR	1,423,857.00	2,852,440.00	4,276,297.00
	JACKSNVL	642,106.00	2,885,327.00	3,527,433.00
	JACKSON	874,299.00	1,108,295.00	1,982,594.00
	KNOXVLLE	780,987.00	1,098,518.00	1,879,505.00
	LOUISVL	711,119.00	1,164,811.00	1,875,930.00
	MEMPHIS	1,343,105.00	.	1,343,105.00
	NASHVLLE	1,171,691.00	1,460,897.00	2,632,588.00
	ORLANDO	997,154.00	.	997,154.00
	PRT RICO	857,243.00	793,327.00	1,650,570.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/28/1996 (FY 1996)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-04	TAMPA	1,353,214.00	.	1,353,214.00
*TOTAL RG_ID RG-04		17,849,108.00	17,827,574.00	35,676,682.00
RG-05	CHICAGO	3,923,006.00	3,401,035.00	7,324,041.00
	CLEVELND	1,493,981.00	2,174,088.00	3,668,069.00
	CNCINATI	679,116.00	954,069.00	1,633,185.00
	COLUMBUS	959,717.00	1,829,872.00	2,789,589.00
	DETROIT	2,237,254.00	1,934,544.00	4,171,798.00
	FLINT	544,187.00	.	544,187.00
	GRND RPD	633,428.00	1,033,092.00	1,666,520.00
	INDNAPLS	1,486,140.00	1,679,429.00	3,165,569.00
	MIN-STPL	1,671,148.00	1,627,650.00	3,298,798.00
	MLWAUKEE	775,158.00	1,381,711.00	2,156,869.00
*TOTAL RG_ID RG-05		14,403,135.00	16,015,490.00	30,418,625.00
RG-06	ALBQRQUE	472,156.00	305,629.00	777,785.00
	DALLAS	405,484.00	711,687.00	1,117,171.00
	FT WORTH	3,215,039.00	2,677,969.00	5,893,008.00
	HOUSTON	1,566,242.00	1,787,845.00	3,354,087.00
	LTL ROCK	1,160,514.00	1,074,980.00	2,235,494.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/28/1996 (FY 1996)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-06	LUBBOCK	895,328.00	.	895,328.00
	NEW ORLN	1,225,709.00	1,266,260.00	2,491,969.00
	OKLA CTY	850,398.00	1,463,356.00	2,313,754.00
	SHRVPORT	673,903.00	250,260.00	924,163.00
	SN ANTON	1,584,418.00	1,615,393.00	3,199,811.00
	TULSA	1,129,745.00	.	1,129,745.00
*TOTAL RG_ID RG-06		13,178,936.00	11,153,379.00	24,332,315.00
RG-07	DES MOIN	617,403.00	892,804.00	1,510,207.00
	KAN CITY	1,368,962.00	2,947,484.00	4,316,446.00
	OMAHA	592,829.00	864,375.00	1,457,204.00
	ST LOUIS	1,198,720.00	1,342,631.00	2,541,351.00
*TOTAL RG_ID RG-07		3,777,914.00	6,047,294.00	9,825,208.00
RG-08	CASPER	175,225.00	.	175,225.00
	DENVER	4,881,560.00	4,104,090.00	8,985,650.00
	FARGO	305,171.00	.	305,171.00
	HELENA	451,216.00	.	451,216.00
	SIOUX FL	201,582.00	.	201,582.00
	SLT LAKE	1,097,788.00	.	1,097,788.00

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
*TOTAL RG_ID RG-08		7,112,542.00	4,104,090.00	11,216,632.00
RG-09	FRESNO	903,409.00	.	903,409.00
	HONOLULU	409,509.00	401,486.00	810,995.00
	L. A.	1,690,393.00	3,368,181.00	5,058,574.00
	LAS VGAS	661,871.00	306,233.00	968,104.00
	PHOENIX	2,421,642.00	1,353,842.00	3,775,484.00
	RENO	308,684.00	.	308,684.00
	SACRMNTO	782,851.00	1,150,585.00	1,933,436.00
	SAN DIEG	339,267.00	537,444.00	876,711.00
	SAN FRAN	769,834.00	3,421,752.00	4,191,586.00
	SNTA ANA	1,954,883.00	.	1,954,883.00
	TUSCON	490,713.00	.	490,713.00
*TOTAL RG_ID RG-09		10,733,056.00	10,539,523.00	21,272,579.00
RG-10	ANCHRAGE	241,540.00	285,718.00	527,258.00
	BOISE	551,933.00	.	551,933.00
	PORTLAND	514,479.00	1,661,587.00	2,176,066.00
	SEATTLE	880,977.00	2,282,267.00	3,163,244.00
	SPOKANE	224,993.00	.	224,993.00

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
*TOTAL RG_ID RG-10	2,413,922.00	4,229,572.00	6,643,494.00
*TOTAL FISCAL_YEAR 1996	97,271,040.00	103,311,392.00	200,582,432.00

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
HQ	HOUSING	10,365,595.00	11,171,847.00	21,537,442.00
RG-01	BANGOR	114,762.00	.	114,762.00
	BOSTON	842,592.00	2,956,266.00	3,798,858.00
	BURLGTN	45,484.00	.	45,484.00
	HARTFORD	786,131.00	1,387,010.00	2,173,141.00
	MANCHSTR	524,083.00	781,476.00	1,305,559.00
	PROVIDNC	274,093.00	878,392.00	1,152,485.00
*TOTAL RG_ID RG-01		2,587,145.00	6,003,144.00	8,590,289.00
RG-02	ALBANY	977,670.00	.	977,670.00
	BUFFALO	889,503.00	1,631,080.00	2,520,583.00
	CAMDEN	832,603.00	.	832,603.00
	NEW YORK	1,160,999.00	5,120,390.00	6,281,389.00
	NEWARK	614,825.00	1,804,537.00	2,419,362.00
*TOTAL RG_ID RG-02		4,475,600.00	8,556,007.00	13,031,607.00
RG-03	BALTIMOR	1,567,365.00	1,411,742.00	2,979,107.00
	CHARLSTN	305,313.00	418,498.00	723,811.00

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-03	PHILA	2,596,784.00	2,051,894.00	4,648,678.00
	PITTSBRG	805,809.00	1,341,820.00	2,147,629.00
	RICHMOND	1,574,318.00	1,530,275.00	3,104,593.00
	WASH DC	1,704,262.00	1,628,844.00	3,333,106.00
	WILMNGTN	107,735.00	.	107,735.00
*TOTAL RG_ID RG-03		8,661,586.00	8,383,073.00	17,044,659.00
RG-04	ATLANTA	2,799,955.00	3,776,565.00	6,576,520.00
	BRMNGHAM	1,411,650.00	1,579,730.00	2,991,380.00
	COLUMBIA	1,268,339.00	1,336,423.00	2,604,762.00
	CORAL GB	1,994,613.00	.	1,994,613.00
	GREENSBR	1,226,997.00	2,699,040.00	3,926,037.00
	JACKSNVL	710,386.00	2,817,130.00	3,527,516.00
	JACKSON	859,368.00	1,079,409.00	1,938,777.00
	KNOXVLLE	617,177.00	1,045,859.00	1,663,036.00
	LOUISVL	829,958.00	1,258,537.00	2,088,495.00
	MEMPHIS	1,341,864.00	.	1,341,864.00
	NASHVLLE	1,052,447.00	1,573,440.00	2,625,887.00
	ORLANDO	998,478.00	.	998,478.00
	PRT RICO	733,480.00	812,811.00	1,546,291.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/30/1995 (FY 1995)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-04	TAMPA	1,329,700.00	.	1,329,700.00
*TOTAL RG_ID RG-04		17,174,412.00	17,978,944.00	35,153,356.00
RG-05	CHICAGO	3,870,260.00	3,413,330.00	7,283,590.00
	CLEVELND	1,371,427.00	2,047,025.00	3,418,452.00
	CNCINATI	643,959.00	882,036.00	1,525,995.00
	COLUMBUS	940,301.00	1,828,133.00	2,768,434.00
	DETROIT	2,103,559.00	1,831,491.00	3,935,050.00
	FLINT	645,012.00	.	645,012.00
	GRND RPD	619,475.00	1,131,568.00	1,751,043.00
	INDNAPLS	1,339,597.00	1,828,954.00	3,168,551.00
	MIN-STPL	1,900,562.00	1,593,539.00	3,494,101.00
	MLWAUKEE	768,177.00	1,326,031.00	2,094,208.00
	SPRNGFLD	46,249.00	.	46,249.00
*TOTAL RG_ID RG-05		14,248,578.00	15,882,107.00	30,130,685.00
RG-06	ALBQRQUE	612,359.00	304,319.00	916,678.00
	DALLAS	495,527.00	669,124.00	1,164,651.00
	FT WORTH	3,210,777.00	2,344,345.00	5,555,122.00
	HOUSTON	1,507,690.00	1,882,935.00	3,390,625.00

REPORT: FYHSGFAM RUN DATE 06/01/00 P.P. END: 09/30/1995 (FY 1995)
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-06	LTL ROCK	1,183,661.00	772,172.00	1,955,833.00
	LUBBOCK	904,710.00	.	904,710.00
	NEW ORLN	1,289,763.00	1,147,368.00	2,437,131.00
	OKLA CTY	610,601.00	1,379,876.00	1,990,477.00
	SHRVPORT	626,972.00	287,867.00	914,839.00
	SN ANTON	1,546,144.00	1,500,922.00	3,047,066.00
	TULSA	1,309,919.00	.	1,309,919.00
*TOTAL RG_ID RG-06		13,298,123.00	10,288,928.00	23,587,051.00
RG-07	DES MOIN	703,663.00	861,718.00	1,565,381.00
	KAN CITY	1,423,945.00	2,816,500.00	4,240,445.00
	OMAHA	623,061.00	801,973.00	1,425,034.00
	ST LOUIS	1,004,843.00	1,507,409.00	2,512,252.00
*TOTAL RG_ID RG-07		3,755,512.00	5,987,600.00	9,743,112.00
RG-08	CASPER	220,605.00	.	220,605.00
	DENVER	4,891,634.00	3,951,574.00	8,843,208.00
	FARGO	341,130.00	.	341,130.00
	HELENA	488,380.00	.	488,380.00
	SIOUX FL	182,969.00	.	182,969.00

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

	OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-08	SLT LAKE	1,141,221.00	.	1,141,221.00
*TOTAL RG_ID RG-08		7,265,939.00	3,951,574.00	11,217,513.00
RG-09	FRESNO	1,090,539.00	.	1,090,539.00
	HONOLULU	345,638.00	472,099.00	817,737.00
	L. A.	1,674,353.00	3,457,179.00	5,131,532.00
	LAS VGAS	380,780.00	316,242.00	697,022.00
	PHOENIX	2,147,672.00	1,473,038.00	3,620,710.00
	RENO	502,165.00	.	502,165.00
	SACRMNTO	735,100.00	1,071,328.00	1,806,428.00
	SAN DIEG	336,326.00	515,031.00	851,357.00
	SAN FRAN	671,589.00	3,590,976.00	4,262,565.00
	SNTA ANA	1,863,533.00	.	1,863,533.00
	TUSCON	599,990.00	.	599,990.00
*TOTAL RG_ID RG-09		10,347,685.00	10,895,893.00	21,243,578.00
RG-10	ANCHRAGE	370,316.00	263,006.00	633,322.00
	BOISE	560,917.00	.	560,917.00
	PORTLAND	394,044.00	1,540,599.00	1,934,643.00
	SEATTLE	854,341.00	2,293,006.00	3,147,347.00

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PART-1 SPECIFIED HOUSING STAFF SALARIES SUMMARIZED BY FISCAL YEAR

OFFICE	SINGLE FAMILY	MULTIFAMILY	TOTAL
RG-10 SPOKANE	238,898.00	.	238,898.00
*TOTAL RG_ID RG-10	2,418,516.00	4,096,611.00	6,515,127.00
*TOTAL FISCAL_YEAR 1995	94,598,691.00	103,195,728.00	197,794,419.00

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I-OPC-93-00001	H	BUCHET, DONNER ALLEN, FAYE J	11/3/1992	9/30/1996		$2,251,000	$2,251,000	FHA DEBENTURE SVCS
I-OPC-95-00064	H	LEAHY, THOMAS E ALLEN, FAYE J	7/7/1995	12/13/1996		$2,000,000	$2,000,000	VETERANS PARTICIPATION IN 1996 PARALYMPIC GAMES
I-OPC-95-00069	H	WEAVER, CHARLENE R ALLEN, FAYE J	6/9/1995	9/30/1996		$207,000	$207,000	DISTRIBUTION OF DISTANCE LEARNING MATERIALS
I-OPC-95-00083 GRADUATE SCHOOL, USDA	H	HYLTON, LANIER M ALLEN, FAYE J	9/29/1995	9/30/1998		$500,000	$500,000	TECH ASSIS ADVISORS CAPACITY BLDG
I-OPC-95-00091	H	BALSHAM, JOEL ALLEN, FAYE J	9/15/1995	1/31/1996		$0	$0	TECH ASSIS INDENTIFY ISSUSE RELATED TO ORGAN
I-OPC-96-00058	H	DALZELL, ROBERT D ALLEN, FAYE J	8/9/1996	11/15/1996		$25,000	$25,000	RISK MANAGEMENT POLICY OPTIONS
C-OPC-18434	H	GLASPIE, BRENDA L ALLEN, JOSHULYN (FA	7/10/1995	9/30/1998		$1,463,920	$617,920	MAIL HANDLING/INSURANCE CLAIMS PACKAGE PROCESS
C-OPC-18441	H	WHITAKER, BEULAH M ALLEN, JOSHULYN (FA	9/30/1996	8/31/2000		$2,703,967	$0	MICRO SIMULATION ACTUARIAL MODEL
C-OPC-18560 INDEPENDENT POSTAL FINANCIAL CONSULTANTS, INC.	H	SMITH, CLIFFORD F ALLEN, JOSHULYN (FA	1/5/1998 OTHER	1/5/2001	1/4/1998	$566,705	$406,210	EVALUATE ENHANCEMENTS TO FHACTS SYSTEM
C-OPC-18574 OCR SERVICES, INCOPORATED	H	BREDEN, LESLIE H ALLEN, JOSHULYN (FA	8/19/1997	8/19/2000		$1,695,777	$2,544,676	FHA/HUD Homes Hotline Operation.

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C-OPC-21051 WALKER & COMPANY, LLP	H	COLES, VALERIE L ALLEN, JOSHULYN (FA	8/2/1999 CONSTRUCTION/REPAIR	8/2/2004	8/2/2004	$21,608,315	$442,304	Comprehensive administrative, professional accounting, financial and auditing
C-OPC-21139 NATIONAL EVALUATION SERVICES, INC.	H	CLARK, MARGARET B ALLEN, JOSHULYN (FA	5/13/1998	5/13/2001		$1,867,219	$1,161,000	A&E services forTA and support for engineering/ building code in FHA programs.
C-OPC-21265 BROWN & COMPANY CPAS, PLLC	H	KING, BEVERLY M ALLEN, JOSHULYN (FA	9/1/1998	2/29/2000	2/29/2000	$889,180	$889,180	iDummy contract for GSA Schedule. Contract GS-23F-8156H with Brown & Co.
C-OPC-21280 COX & ASSOCS	H	ALLEN, JOSHULYN (FA	9/30/1998	9/30/2002	9/30/2002	$4,436,262	$4,186,262	IQC- GSA Schedule Purchases
C-OPC-21296 BDM INTERNATIONAL, INC.	H	MCDANIELS, DELORES ALLEN, JOSHULYN (FA	9/30/1998	3/28/1999	3/28/1999	$238,192	$238,192	Contract for Schedule -IQC
C-OPC-21370 STERLING HEALTH CAPITAL MNGT	H	KAPLAN, DONALD A ALLEN, JOSHULYN (FA	7/2/1999	7/1/2004		$110,000	$53,000	MASTER HOSPITAL
C-OPC-21378 AEW CAPITAL MANAGEMENT	H	TUCKER, GENEVIEVE ALLEN, JOSHULYN (FA	3/19/1999	3/19/1999	3/19/2004	$57,471,856	$4,885,928	GSA - DUMMY IQC CONTRACT
C-OPC-21457 CREDIT BUREAU REPORT	H	BAUMAN, DENISE J ALLEN, JOSHULYN (FA	5/17/1999	6/17/1999		$350,000	$350,000	GSA/FSS - "Factual Data Reports"
C-OPC-21497	H	COLES, VALERIE L ALLEN, JOSHULYN (FA	8/2/1999	8/2/2004	8/2/2004	$20,000,000	$0	Comprehensive administrative, professional accounting, financial and auditing se
C-OPC-21498 PARKER, WHITFIELD & CO., P.C.	H	COLES, VALERIE L ALLEN, JOSHULYN (FA	8/2/1999	8/2/2004	8/2/2004	$0	$0	Comprehensive administrative, professional accounting, financial and auditing se

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I-OPC-95-00036 CORPORATION FOR NATIONAL SERVICE	H	VINCENT, THOMAS R ALLEN, JOSHULYN (FA	3/1/1995	9/30/1998		$3,500,000	$3,500,000	T & A SVCS & VOLUNTEERS HUD-OWNED PROPERTIES
C-OPC-15744	H	AMMONS-BARNETT, (A.	9/29/1989	9/30/1990		$476,617	$0	TEST & DATA COLLECTION FOR MANUFACTURED HSG
C-OPC-18481 CARRO VELEZ CARRO & MITCHELL	H	AMMONS-BARNETT, (A.	5/28/1996	12/12/1996		$280,494	$33,125	MF LEGAL ENFORCEMENT
C-OPC-18508	H	AMMONS-BARNETT, (A.	12/12/1995	12/12/1996	12/12/1996	$468,625	$116,628	LEGAL SERVICES
C-OPC-18509 WEST BAY LAW	H	AMMONS-BARNETT, (A.	12/12/1995	12/12/1996	12/12/1996	$540,071	$132,868	LEGAL ENFORCEMENT SERVICES
C-OPC-18510 LEGAL SERVICE NORTH TEXAS	H	AMMONS-BARNETT, (A.	12/12/1995	12/12/1996	12/12/1996	$489,013	$128,583	LEGAL ENFORCEMENT SERVICES
C-OPC-21475 FOLEY, HOAG & ELIOT, LLP	H	WHITAKER, BEULAH M BECTON, AVERY D	9/1/1999	9/30/2000	8/31/2000	$300,000	$200,000	Outside counsel to provide litigation support services - Energy Capital Corp. vs
I-OPC-95-00071 U. S. DEPT OF JUSTICE	H	BAUMAN, DENISE J BEST, CHIARA S	6/22/1995	4/30/2000		$709,000	$709,000	IMMIGRATION STATUS VERIFICATION
C-OPC-16787	H	CHESLEY, C. VICTORIA	8/20/1993	9/20/1996		$9,350,000	$0	ASSET MANAGENT MULTIFAMILY REQUIREMENT
C-OPC-18392 SOZA & COMPANY LTD	H	BLANK, SELECTION CHESLEY, C. VICTORIA	9/30/1994 OTHER	10/13/1997	10/13/1997	$10,455,384	$1,158,014	SINGLE FAMILY PROPERTY DISPOSITION VENDOR

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C-OPC-18393 MILVETS SYSTEMS TECHNOLOGY INC	H	BLANK, SELECTION CHESLEY, C. VICTORIA	9/30/1994	10/13/1999	10/13/1997	$3,011,275	$354,452	SINGLE FAMILY PROPERTY DISPOSITION VENDOR
C-OPC-18545	H	SWEENEY, JOAN B CHESLEY, C. VICTORIA	9/30/1996	3/29/1998		$700,000	$0	EQUITY MONITORING SERVICES
C-OPC-20003	H	CHESLEY, C. VICTORIA	8/15/1991	4/14/1995		$62,937,552	$0	PROV MRKTNG & PROMTNL ASST SALE HUD SF PRPT/-M2
C-OPC-20005	H	CHESLEY, C. VICTORIA	12/20/1991	1/19/1995		$500,968	$0	TECH ASST SERVICING MULTIFAMILY LOANS/-M2
C-OPC-20007	H	CHESLEY, C. VICTORIA	2/28/1992	3/28/1993		$0	$0	TECH ASST ANALYZE BULK SALES HUD FRCLSD PRP/M1
C-OPC-21368 PRICEWATERHOUSE COOPERS, LLP	H	BRANSFORD, MARY K CHESLEY, C. VICTORIA	7/2/1999	7/1/2004		$79,510	$21,124	MASTER HOSPITAL
C-OPC-21369 CENTER FOR HEALTH POLICY STUDIES	H	KAPLAN, DONALD A CHESLEY, C. VICTORIA	7/2/1999	7/1/2004		$153,500	$153,500	MASTER HOSPITAL
C-OPC-21494 GARDINER KAMYA & ASSOC	H	YOUNG, JUNE H CHESLEY, C. VICTORIA	7/30/1999	7/30/2004		$365,657	$0	Omnibus contract - comprehensive administrative, professional, accounting, finan
C-OPC-21551 IRON MOUNTAIN	H	CHESLEY, C. VICTORIA	9/17/1999	9/16/2007		$504,512	$504,512	Dummy GSA Contract for Pierce Leahy Archives
C-OPC-21505 DOXSYS, INC.	H	VINCENT, THOMAS R FADLELMOLA, BELINDA	9/7/1999	3/7/2000	6/6/2000	$559,005	$745,668	Correction of SF Case Records in Preparation for Implementation of Case Level Pr

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C-OPC-21531 ERNST & YOUNG LLP	H	MCDANIELS, DELORES FADLELMOLA, BELINDA	9/29/1999	5/17/2000	5/17/2000	$1,318,522	$754,666	Review and Analysis of Currenct Activities Governing Section 8 HAP
C-OPC-21533 BEST COPY & PRINTING INC.	H	TANNER, KATHY E FADLELMOLA, BELINDA	2/8/2000	6/30/2000	6/30/2000	$221,173	$221,173	Pilot to image paper to CD Roms
C-OPC-21580 NCI INFORMATION SYSTEMS INC	H	COLES, VALERIE L FADLELMOLA, BELINDA	11/18/1999	11/18/2000	11/18/2001	$334,833	$334,833	SFIOD document, forms & correspondence process & prep for microfilming.
C-OPC-21686 DEVA & ASSOCIATES	H	KING, BEVERLY M FADLELMOLA, BELINDA	4/11/2000	4/12/2001	4/12/2001	$0	$0	ASSET SALES DUE DILIGENCE - 8(A) - BASIC CONTRACT
C-OPC-21687 GARDINER KAMYA & ASSOC	H	KING, BEVERLY M FADLELMOLA, BELINDA	4/11/2000	4/12/2001	4/12/2001	$5,726,300	$5,726,300	ASSET SALES DUE DILIGENCE - 8(A) - BASIC CONTRACT
C-OPC-21688 OWUSU & COMPANY	H	KING, BEVERLY M FADLELMOLA, BELINDA	4/11/2000	4/12/2001	4/12/2001	$0	$0	ASSET SALES DUE DILIGENCE - 8(A) - BASIC CONTRACT
C-OPC-21689 SENTECH, INC.	H	KING, BEVERLY M FADLELMOLA, BELINDA	4/11/2000	4/13/2000	4/13/2000	$0	$0	ASSET SALES DUE DILIGENCE - 8(A) - BASIC CONTRACT
I-OPC-21471 U. S. DEPT OF JUSTICE	H	BAUMAN, DENISE J FADLELMOLA, BELINDA	8/13/1999	9/30/1999	9/30/1999	$62,000	$62,000	Interagency agreement between HUD and INS to utilize "SAVE Program"
P-OPC-21524 WENDOVER FINANCIAL SERVICES CORP	H	BREDEN, LESLIE H FADLELMOLA, BELINDA	9/28/1999	3/30/2000	3/31/2000	$41,040	$41,040	HECM LOANS
C-OPC-16722 MYINT & BUNTUA CPA	H	FIELDS, PATRICIA (PAM	9/17/1991	9/18/1996	9/16/1994	$19,373,467	$377,633	IQC ACCOUNTING/INSURANCE ADMINISTRATIVE SUPPORT

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C-OPC-15916	H	FIELDS, PATRICIA (PAM	9/30/1992	2/28/1995		$2,000,000	$0	PRE-FORECLOSURE SALE DEMONSTRATION PROGRAM
C-OPC-18153	H	FIELDS, PATRICIA (PAM	9/30/1992	2/28/1995		$425,000	$0	LIMITED DEMONSTRATION OF PRE-FORECLOSURE SALES
C-OPC-18154	H	FIELDS, PATRICIA (PAM	9/30/1992	2/28/1995		$1,000,000	$0	LIMITED DEMONSTRATION OF PRE-FORECLOSURE SALES
C-OPC-18477	H	FIELDS, PATRICIA (PAM	7/28/1995 OTHER	7/27/1997		$11,161,298	$5,921,000	ADMIN ACCOUNTING & FINANCIAL SVCS
C-OPC-18543	H	WELLS, MICHAEL C FIELDS, PATRICIA (PAM	9/27/1996	7/31/1998		$263,712	$23,898	MORTGAGE MARKET REPORTS
C-OPC-21297 BOOZ ALLEN & HAMILTON, INC.	H	WEBB, PETER W FIELDS, PATRICIA (PAM	11/6/1998	2/2/1999		$750,000	$750,000	Contract for GSA Schedule GS-23F-9755H.
C-OPC-21611 MYERBERG & COMPANY, L.P.	H	SMITH, CLIFFORD F FIELDS, PATRICIA (PAM	2/14/2000	2/13/2001		$1,289,754	$1,289,754	Transaction Specialist for Single Family Mortgage Notes - GSA Order
C-OPC-21615 SECURED CAPITAL CORP	H	PETERS, HELEN J FIELDS, PATRICIA (PAM	2/4/2000	2/3/2001		$4,400,000	$1,739,943	Multifamily Transaction Specialist services under GSA Schedule
I-OPC-96-00035 U. S. DEPT OF TREASURY	H	GLASPIE, BRENDA L FIELDS, PATRICIA (PAM	5/11/1996	9/30/1999		$1,216,000	$1,216,000	PROVIDE MATERIALS & REPORTS
C-OPC-18386	H	PATTERSON, CHARLES GANTT, ELOISE F	9/23/1994	9/22/1999	9/22/1995	$1,221,500	$410,000	STORAGE FACILITIES MGMT & RETRIEVAL

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C-OPC-18530	H	GANTT, ELOISE F	7/5/1996	7/5/1996		$1,500,000	$0	MFPD ADVERTISING & FLORECLOSURES
C-OPC-21299 NATL CONF STATES ON BLDG CODES & STANDARDS	H	CLARK, MARGARET B GIBSON, MONICA	11/9/1998	11/9/2000	11/9/2001	$16,638,559	$13,511,243	MANUFACTURED HOUSING MONITORING CONTRACT
C-OPC-18542 PRICEWATERHOUSE COOPERS, LLP	H	GLYMPH, KELVIN	5/20/1996	5/20/2000		$8,511,523	$6,794,300	MANAGEMENT STUDIES
C-OPC-14492	H	GUNN, MELVIN W	9/20/1988	9/30/1995		$32,043,115	$0	AUTOMATED ACCOUNTING/SVCS FOR TITLE I DEFAULTED
C-OPC-16674	H	HALL, LAVERNE L	4/11/1991	8/11/1994		$1,689,126	$0	PREPARE SINGLE FAMILY CASE BINDERS
C-OPC-16993	H	HALL, LAVERNE L	9/20/1991	9/19/1995		$550,341	$0	IQC TECHNICAL WRITING SERVICES FOR HANDBOOKS
C-OPC-16994	H	HALL, LAVERNE L	9/19/1991	9/18/1995		$127,928	$0	IQC TECHNICAL WRITING SERVICES FOR HANDBOOKS
C-OPC-18126	H	HALL, LAVERNE L	9/3/1992	9/30/1995		$12,751,858	$0	SINGLE FAMILY PROPERTIES AUCTION SVCS
C-OPC-18145 PRICE WATERHOUSE	H	BLANK, SELECTION HALL, LAVERNE L	8/5/1993	8/5/1998		$1,650,852	$322,926	ACTUARIAL REVIEW FHA MMIF FOR FY93
C-OPC-18148	H	BAUMAN, DENISE J HALL, LAVERNE L	2/2/1993	12/31/1997		$3,631,866	$76,806	MAIL HANDLING & MICROGRAPHIC SVCS

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C-OPC-18150 STRATEGIC MORTGAGE SERVICES INC (SMS)	H	YOUNG, JUNE H HALL, LAVERNE L	2/28/1994	4/30/1999		$60,604,258	$18,758,258	APPRAISAL SVCS NATIONWIDE
C-OPC-18261	H	HALL, LAVERNE L	9/30/1993	3/31/1997		$439,000	$0	ADMIN CHANGE RE AUTH TO ISSUSE DEL ORDERS
C-OPC-18326	H	HALL, LAVERNE L	5/18/1993	5/18/1997		$275,000	$0	PROPERTY DISPOSITION MAILING/MAILING LIST SVCS
C-OPC-18364	H	BRANSFORD, MARY K HALL, LAVERNE L	6/17/1994	5/5/1999	4/30/1998	$7,209,760	$1,357,601	SINGLE FAMILY CASE BINDERS FOR STORAGE
C-OPC-18442 AMERICAN BANKERS ASSOCIATION	H	SHEPHERD, CAROL S HALL, LAVERNE L	9/28/1995	7/31/1999		$586,049	$58,650	GROSS FLOWS SURVEY
C-OPC-18462	H	KANE, VERONICA HALL, LAVERNE L	4/10/1996	3/24/1999		$0	$0	AUCTION SERVICES
C-OPC-18485 KERRY COMPANY	H	SMITH, CLIFFORD F HALL, LAVERNE L	12/5/1996	6/10/2000		$4,175,884	$4,175,884	SPECIAL WORKOUT ASSISTANCE TEAM (SWAT) TA
C-OPC-20000	H	HALL, LAVERNE L	8/27/1990	1/31/1994		$10,564,000	$0	PROV MORTGAGE INSURANCE/1-4 UNIT SF PROJ/-M5
C-OPC-20001	H	HALL, LAVERNE L	11/15/1989	1/6/1993		$0	$0	PROPERTY DISPOSITION TRANSFER AWARD/-M5
C-OPC-20006	H	HALL, LAVERNE L	5/7/1992	5/6/1996		$4,379,250	$0	PROV ADVRTSMTS FORCLOSURE SALES MF PRJTS/-M1

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C-OPC-21213 COX & ASSOCS	H	BRANSFORD, MARY K HALL, LAVERNE L	9/18/1998	5/12/2000	9/18/1999	$2,222,744	$1,466,744	GSA SCHEDULE PURCHASE-FHA FINANCIAL DATA WAREHOUSE SC
C-OPC-21316 DELCLOS/WALSH ASSOCIATES, INC.	H	YOUNG, JUNE H HALL, LAVERNE L	12/7/1998	12/7/1998	12/6/2003	$1,125,000	$770,000	GSA Financial Asset Services: SIN 621-3.
C-OPC-21359 KAJAX ENGINEERING INC	H	COLES, VALERIE L HALL, LAVERNE L	2/11/1999	2/11/2004		$8,030,320	$8,030,320	Technical Services to Assist Single Family Insurance Operations and Post Insuran
C-OPC-21487 AMERICAN MANAGEMENT SYSTEMS, INC.	H	WHITAKER, BEULAH M HALL, LAVERNE L	7/19/1999	7/19/2000		$174,660	$174,660	evaluation of manufactured housing electronic data management
C-OPC-21490 DELOITTE & TOUCHE	H	BLANK, SELECTION HALL, LAVERNE L	7/27/1999	7/27/2000	7/27/2003	$199,956	$399,912	ANNUAL ACTUARIAL REVIEW OF FHA MUTUAL MORTGAGE INSURANCE FUND
C-OPC-21577 PRICEWATERHOUSE COOPERS, LLP	H	CLARK, MARGARET B HALL, LAVERNE L	11/19/1999	4/6/2000		$279,180	$279,180	Section 242 Credit Subsidy and Risk Analysis
I-OPC-21232 HEALTH CARE FINANCING ADMINISTRATION	H	GLASPIE, BRENDA L HALL, LAVERNE L	9/2/1998	5/31/2000	9/30/1998	$49,800	$49,800	Nursing Home Study
I-OPC-21564 U. S. DEPT OF JUSTICE	H	PETERS, HELEN J HALL, LAVERNE L	9/30/1999	1/1/2001	1/1/2001	$200,000	$200,000	DOJ provides legal assistnace to HUD on judicial foreclosures of SHM accounts as
I-OPC-93-00063	H	KRAFT, JOAN F HALL, LAVERNE L	7/20/1993	9/30/1995		$4,300,000	$4,300,000	NATL LEAD-BASED PAINT TESTING IN EXISTING HSG
I-OPC-96-00097	H	PAGE, RICHARD O HALL, LAVERNE L	5/12/1997	9/30/1997		$24,900	$24,900	NURSING HOME MEDICAID STUDY

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I-OPC-97-00020 GENERAL SERVICES ADMINISTRATION (GSA)	H	VINCENT, THOMAS R HALL, LAVERNE L	2/11/1997	9/25/1999	2/14/1998	$715,400	$715,400	INFORMAION TECH SUPPORT OFFICE LENDING
I-OPC-97-00026	H	BRADLEY, RICHARD J HALL, LAVERNE L	5/6/1997	5/6/1997		$47,000	$47,000	INCLUSION OF HUD PUBLICATION IN CATALOG
P-OPC-21579 AFR & ASSOCIATES, INC.	H	CLARK, MARGARET B HALL, LAVERNE L	11/19/1999	6/18/2000	6/18/2000	$23,468	$0	Underwriting non-profit mortgagors
I-NYC-90-00130	H	GOERING, JOHN M HANCOCK, ANNETTE E	2/14/1990	3/21/1990		$2,160	$149,976	CPR TRAINING
I-OPC-96-00038	H	BRADLEY, RICHARD J HANCOCK, ANNETTE E	5/14/1996	9/30/1996		$47,000	$47,000	PROVIDE HUD HOME BUYING BUYING GUIDE
C-OPC-16729	H	JONES, SAMUEL A	9/26/1991	1/31/1994	9/26/1994	$4,492,445	$0	IQC PROFESSIONAL ACCNTNG AND/OR INSURANCE SPRT
C-OPC-16788	H	KITAHARA, KENNETH	9/30/1993	3/30/1996		$1,712,336	$0	TRAINING FOR TITLE VI ELIGIBLE ORGANIZATIONS
C-OPC-18160	H	KITAHARA, KENNETH	1/15/1993	9/30/1997		$737,000	$0	CLAIM PROCESSING TITLE 1
C-OPC-18161 HAMILTON SECURITIES GROUP	H	KITAHARA, KENNETH	9/30/1993	9/30/1998	9/30/1998	$15,232,265	($195,000)	HSG & MORTGAGE TASKS
C-OPC-18324	H	BLANK, SELECTION KITAHARA, KENNETH	6/3/1994	11/30/1998	8/31/1998	$1,128,262	$376,087	NATL BONDING INSURANCE COVERAGE CONTRACT

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C-OPC-18504	H	KITAHARA, KENNETH	1/24/1996	1/24/1998	1/24/1998	$16,830,721	$16,512,590	FINANCIAL ADVISORY SERVICES
C-OPC-18505	H	MILNER, LINDA F KITAHARA, KENNETH	1/24/1996	1/24/1998	1/24/1998	$20,842,000	$0	FINANCIAL ADVISORY SERVICES
C-OPC-18506	H	KITAHARA, KENNETH	2/16/1996	6/28/1996		$0	$0	FINANCIAL ADVISORY SERVICES
C-OPC-20009 ZIERCHER & HOCKER	H	KITAHARA, KENNETH	1/7/1992	1/6/1994		$0	$0	PROPERTY DISPOSITION TRANSFER AWARD/-M2
C-OPC-20020	H	KITAHARA, KENNETH	8/4/1992	8/3/1994		$62,500	$0	FORECLOSURE SERVICES
I-OPC-21149 U.S. DEPT OF TREASURY	H	BAUMAN, DENISE J KITAHARA, KENNETH	3/27/1998 OTHER	3/27/1998	9/30/1998	$640,000	$640,000	FHA DEBENTURE SERVICING INTERAGENCY AGREEMENT
C-OPC-18589 LEGAL SERVICE NORTH TEXAS	H	EAST, KEVIN J MCCORMICK, AMELIA E	8/14/1997 LEGAL SERVICES	8/14/2000		$177,578	$24,370	Contract for Legal Services.
C-OPC-18590 PIPER & MARBURY, LLP	H	EAST, KEVIN J MCCORMICK, AMELIA E	8/14/1997 LEGAL SERVICES	8/14/2000		$0	$0	Contract for Legal Services.
C-OPC-21210 PRICEWATERHOUSE COOPERS, LLP	H	FAULCONER, CASSAN MCCORMICK, AMELIA E	6/3/1998	9/11/1998	9/30/1998	$4,057,388	$4,057,388	HPS entry of new GSA MOBIS schedule contract with Price Waterhouse GS-23F-8004H
C-OPC-21218 PRICEWATERHOUSE COOPERS, LLP	H	KING, BEVERLY M MCDANIELS, DELORES	7/31/1998	9/17/1999		$152,623	$128,439	DRG LITIGATION SUPPORT SERVICES

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C-OPC-18426	H	MENENDEZ, SHIRLEY R	2/14/1995	5/31/1996		$778,200	$0	LEGAL SVCS FOR MORTGAGE SALES
C-OPC-18436 HOLLAND & KNIGHT	H	YOUNG, JUNE H MENENDEZ, SHIRLEY R	3/7/1996	3/7/1998		$1,300,000	$0	LEGAL ASSES SALES SUPPORT SERVICES
C-OPC-18526	H	YOUNG, JUNE H MENENDEZ, SHIRLEY R	3/7/1996	9/8/1999		$3,500,407	$678,822	LEGAL ASSET SALES SUPPORT SERVICES
C-OPC-18527	H	YOUNG, JUNE H MENENDEZ, SHIRLEY R	3/7/1996	3/7/1998		$4,610,448	$1,460,538	LEGAL ASSET SALES SUPPORT SERVICES
C-OPC-18570 MUCH SHELIST FREED	H	EAST, KEVIN J MENENDEZ, SHIRLEY R	8/14/1997	8/14/2000		$0	$0	Contract for Legal Services.
C-OPC-18587 LEWIS, CLAY & MUNDAY, P.C.	H	EAST, KEVIN J MENENDEZ, SHIRLEY R LEGAL SERVICES	8/14/1997	8/14/2000		$0	$0	Contract for Legal Services.
C-OPC-18588 CARRO VELEZ CARRO & MITCHELL	H	EAST, KEVIN J MENENDEZ, SHIRLEY R LEGAL SERVICES	8/14/1997	8/14/2000		$0	$0	Contract for Legal Services.
C-OPC-18591 WEST BAY LAW	H	EAST, KEVIN J MENENDEZ, SHIRLEY R LEGAL SERVICES	8/14/1997	8/14/2000		$0	$0	Contract for legal Services
C-OPC-18512 ICF INCORPORATED	H	WHITAKER, BEULAH M MURPHY, GWENDOLYN	9/30/1996	9/30/2000	9/29/1997	$1,708,791	$1,356,997	NATIONAL HOMEOWNERSHIP STRATEGY
C-OPC-21148 DP SERVICE CORPORATION	H	BREDEN, LESLIE H MURPHY, GWENDOLYN	5/4/1998	5/3/2000	5/3/2001	$13,535,118	$22,954,948	Mortgage Loan Servicing

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C-OPC-21159 UNDERWRITERS SAFETY & CLAIMS, INC.	H	SMITH, CLIFFORD F MURPHY, GWENDOLYN	12/10/1998	12/7/2000	12/6/2002	$330,000	$330,000	National Bonding/insurance services
C-OPC-21569 BROWN & COMPANY	H	WEBB, PETER W MURPHY, GWENDOLYN	9/29/1999	9/29/2004		$1,434,827	$1,434,827	Dummy GSA Contract for Brown & Company
C-OPC-21573 KPMG PEAT MARWICK	H	TANNER, KATHY E MURPHY, GWENDOLYN	11/5/1999	5/30/2000	5/30/2000	$991,345	$0	Basic Contract for GSA Award of T.O. 1 for Automated Underwriting
C-OPC-21624 BEST COPY & PRINTING INC.	H	TANNER, KATHY E MURPHY, GWENDOLYN	2/7/2000	6/30/2000	6/30/2000	$221,173	$221,173	Pilot for the Conversion of Paper Files to CD-ROM
C-OPC-18525	H	YOUNG, JUNE H PEARSON, ISABEL C	3/7/1996 LEGAL SERVICES	3/7/1999	3/7/1999	$17,126,500	$926,000	LEGAL SERVICES
C-OPC-05980 DO NOT USE	H	HEENAN, WILLIAM E PETTY, REGINA A	7/24/1995 MARKET/ADVERTISING	9/30/1998	6/20/1999	$17,421,359	$9,636,353	HUD USED CLEARHOUSE SVCS
C-OPC-18419	H	YOUNG, JUNE H PETTY, REGINA A	1/24/1996	1/24/1998		$9,156,332	$723,900	FINANCIAL ADVISORY SERVICES
C-OPC-18444	H	PETTY, REGINA A	5/22/1995	8/31/1996		$690,000	$0	MORTGAGE RATING SERVICES
C-OPC-18445	H	PETTY, REGINA A	5/22/1995	8/31/1996		$725,000	$0	MORTGAGE RATING SERVICES
C-OPC-21056 DISTRICT COLUMBIA ASSOC RETARDED CITIZEN	H	TANNA, MANJULA M PETTY, REGINA A	9/30/1997 OTHER	10/30/1998		$954,482	$220,000	Claim Processing Services for Title I Insurance Claims

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C-OPC-21602 FEDERAL ASSET ADVISORY COMPANY	H	GLASPIE, BRENDA L PETTY, REGINA A	12/30/1999	12/29/2000		$983,710	$0	FA Services for sale of FHA S/F inventory and M/F mortgage notes
I-OPC-96-00066	H	MEECE, BENJAMIN PETTY, REGINA A	8/28/1996	2/28/1998		$100,000	$100,000	IMPROVE MANUFACTURED HOME FIRE SAFETY
C-OPC-18363 BBDO	H	PETTY, REGINA A ROBERTSON, GAIL L	5/12/1995	5/12/1999		$125,601,797	$70,029,765	MARKETING & ADVERTISING ACQUIRED PROPERTIES
C-OPC-18410	H	ROBERTSON, GAIL L	12/13/1994	12/31/1996		$33,740,895	$0	MORTGAGE NOTE/ASSET SALES
C-OPC-18479	H	ROBERTSON, GAIL L	9/15/1995	9/14/1998		$2,134,142	$1,211,756	SECTION 530 REVIEWS & FOLLOW-UP
C-OPC-18480	H	ROBERTSON, GAIL L	9/15/1995	9/14/1999		$2,999,999	$1,324,999	REVIEW AUDITED FINANCIAL STATEMETS
C-OPC-18544	H	TANNA, MANJULA M ROBERTSON, GAIL L	9/20/1996	3/30/1998		$2,998,652	$2,345,359	ACCTG INSURANCE SUPPORT SVCS
C-OPC-18565 DENNISON ASSOCIATES	H	GLASPIE, BRENDA L ROBERTSON, GAIL L	5/15/1997	11/15/2000		$458,052	$458,052	To Assist HUD with the consolidation of Single Family functions from 80 Field O
C-OPC-18603 MYINT & BUNTUA CPA	H	PETERS, HELEN J ROBERTSON, GAIL L	11/14/1997	11/13/1998	11/13/1998	$6,782,381	$3,732,078	Professional Accounting and Insurance Support
C-OPC-21216 COX & ASSOCS	H	BRANSFORD, MARY K ROBERTSON, GAIL L	6/26/1998	7/30/1999	6/25/1999	$2,578,464	$1,589,232	GSA-Auditing/FMS Schedule purcahse Interim/year-end GAAP accounting services

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C-OPC-21217 PRICEWATERHOUSE COOPERS, LLP	H	MINCEMOYER, ROBER ROBERTSON, GAIL L	6/26/1998	6/26/1998	6/25/1999	$4,614,247	$3,626,102	GSA Auditing/FMS schedule Interim/Year end credit reform accting services
C-OPC-21495 BROWN & COMPANY CPAS, PLLC	H	YOUNG, JUNE H ROBERTSON, GAIL L	7/30/1999	7/30/2004		$6,913,022	$5,511,097	Omnibus contract - comprehensive administrative, professional, accounting, finan
C-OPC-21555 COX & ASSOCS	H	YOUNG, JUNE H ROBERTSON, GAIL L	9/28/1999	7/29/2004		$20,000,000	$0	Omnibus contract - Support Services
C-OPC-21556 URBACH, KAHN & WERLIN, P.C.	H	BREDEN, LESLIE H ROBERTSON, GAIL L	9/29/1999	9/28/2002	9/28/2002	$1,650,000	$1,650,000	Review of Audited Financial Statements
C-OPC-21627 T. CURTIS & COMPANY	H	KING, BEVERLY M ROBERTSON, GAIL L	2/14/2000	2/27/2001	2/27/2001	$3,000,000	$1,485,356	PROVIDE MONITORING SUPPORT OF SF PROPERTY DISPOSITION (GSA BUY)
I-OPC-21068 U. S. DEPT OF TREASURY	H	SWEENEY, JOAN B ROBERTSON, GAIL L	12/19/1997 TITLE SVCS	6/18/1998		$70,450	$0	
I-OPC-97-00044	H	SWARTZBAUGH, JEFFR ROBERTSON, GAIL L	9/23/1997	1/22/1998		$97,900	$97,900	SKIP TRACING/LETTER FORWARDING REVIEW M/F CLAIMS REVIEW PROCESS/DEVELOP GUIDE
C-OPC-18416	H	SMITH, JANICE E	2/10/1995	1/31/1996		$300,000	$0	LEGAL SVCS FOR MORTGAGE SALES
C-OPC-18427	H	SMITH, JANICE E	2/15/1995	1/31/1996		$1,950,000	$0	LEGAL SVCS FOR MORTGAGE SALES
I-OPC-94-00014 FEDERAL HOUSING ENTERPRISES	H	BUCHET, DONNER SMITH, JANICE E	1/5/1994	12/31/1998		$725,000	$725,000	FACILITES RENTAL

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I-OPC-97-00049	H	SIMMS, JOANNE W SMITH, JANICE E	9/16/1997	9/30/1997		$10,000	$10,000	REIMBURSE FBI FOR SALERY AND BENIFITS OF E.J.KRA
I-NYC-94-00112	H	SIMMS, JOANNE W STEVER, EDWARD T	2/28/1994	9/30/1994		$51,000	$1,261,340	INSURANCE ENDORSEMENT PROCESSING
C-OPC-18170	H	TAYLOR, DEBORAH R	5/14/1993	5/13/1998		$11,550,908	$1,605,943	SINGLE FAMILY POST CLAIMS REVIEW
C-OPC-18424	H	SHEPHERD, CAROL S TAYLOR, DEBORAH R	7/14/1995 OTHER	8/21/1998		$14,101,299	$6,521,870	ADMINISTRATIVE ACCOUNTING & FINANCIAL SVCS
C-OPC-18575 DISTRICT OF COLUMBIA ASSOC. OF RETARDED CITIZENS	H	TANNA, MANJULA M TAYLOR, DEBORAH R	9/30/1997	9/30/1998		$176,321	$176,321	Claim Processing Services forTitle 1 Insuance Claims.
C-OPC-00089 ABT ASSOCIATES	H	BRENNAN, KATE WRIGHT, C. (DIANNE) D	8/14/1998	8/13/2003	8/14/2003	$142,440	$55,440	PROGRAM EVALUATION, DEVELOPMENT & IMPLEMENTATION
C-OPC-18131	H	COLES, VALERIE L WRIGHT, C. (DIANNE) D	6/11/1993	12/31/1999	12/31/1999	$53,769,388	$15,854,500	RISK-BASED PREMIUM RECONCILIATION
C-OPC-18141	H	CLARK, MARGARET B WRIGHT, C. (DIANNE) D	10/29/1993	11/10/1999		$40,186,282	$13,469,618	RECOMPETE MANUFACTURED HSG MONITORING CONTRACT
C-OPC-21187 SOZA & COMPANY LTD	H	BREDEN, LESLIE H WRIGHT, C. (DIANNE) D	5/27/1998	10/28/1999	3/20/2003	$1,900,000	$1,896,320	Single Family Property Disposition (SAMS) disbursement and Global File Maintenan.
C-OPC-21192 BOOZ ALLEN & HAMILTON INC	H	BRENNAN, KATE WRIGHT, C. (DIANNE) D	8/14/1998	8/13/2003		$0	$0	PROGRAM EVALUATION, DEVELOPMENT AND IMPLEMENTATION OF MULTIFAMILY PROGRAMS

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HUD PROCUREMENT SYSTEM (HPS)

DATE: Jun 05, 2000
3:05 PM

AWARDED ACTIVE CONTRACTS SUMMARY REPORT

REPORTING PERIOD: FROM 01/01/1901 TO 06/05/2000

OFFICE OF PROCUREMENT AND CONTRACTS (HQ)

Active/Awarded

CONTRACT NO. / CONTRACTOR	CUSTOMER DOCS	GTR NAME/ SPECIALIST	AWARD DATE / SERVICE TYPE	COMPLETION DATE	LAST COMPLETION DATE	VALUE AMOUNT	OBLIGATED AMOUNT	DESCRIPTION
C-OPC-21193 PRICEWATERHOUSE COOPERS, LLP	H	BRENNAN, KATE WRIGHT, C. (DIANNE) D	8/14/1998	8/13/2003		$1,500,000	$1,019,601	PROGRAM EVALUATION, DEVELOPMENT & IMPLEMENTATION
C-OPC-21195 DO NOT USE	H	BRENNAN, KATE WRIGHT, C. (DIANNE) D	8/14/1998 PROPERTY MGMT-MF	8/13/2003		$25,290,399	$290,399	PROGRAM EVALUATION, DEVELOPMENT AND IMPLEMENTATION OF MULTIFAMILY PROGRAMS
C-OPC-21196 ERVIN & ASSOCIATES, INC.	H	BRENNAN, KATE WRIGHT, C. (DIANNE) D	8/14/1998 PROPERTY MGMT-MF	8/13/2003		$25,000,000	$0	PROGRAM EVALUATION, DEVELOPMENT & IMPLEMENTATION FOR MULTIFAMILY PROGRAMS
C-OPC-21273 PRICEWATERHOUSE COOPERS, LLP	H	BREDEN, LESLIE H WRIGHT, C. (DIANNE) D	9/19/1998	9/19/2003	9/19/2003	$5,908,899	$4,608,947	FINANCIAL MGMT SVCS/INTERIM & YEAR-END CLOSING CREDIT REFORM
I-OPC-95-00063	H	BRADLEY, RICHARD J WRIGHT, C. (DIANNE) D	5/31/1995	9/30/1995		$47,000	$47,000	DISTRIBUTE HUD'S PUBLICATION IN GSA INFO CATALOG

Total Contracts having Status Active/Awarded 165 Totals under Active/Awarded $987,021,859 $311,285,373

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
HUD PROCUREMENT SYSTEM (HPS)

DATE: Jun 05, 2000
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AWARDED ACTIVE CONTRACTS SUMMARY REPORT

REPORTING PERIOD: FROM 01/01/1901 TO 06/05/2000

OFFICE OF PROCUREMENT AND CONTRACTS (HQ)

Active/In Closeout

CONTRACT NO. CONTRACTOR	CUSTOMER DOCS	GTR NAME/ SPECIALIST	AWARD DATE SERVICE TYPE	COMPLETION DATE	LAST COMPLETION DATE	VALUE AMOUNT	OBLIGATED AMOUNT	DESCRIPTION
C-OPC-18476	H	FIELDS, PATRICIA (PAM	7/13/1995	7/14/1997		$4,776,865	$1,280,332	ADMINISTRATIVE ACCOUNTING & FINANCIAL SVCS
C-OPC-18421	H	HALL, LAVERNE L	1/13/1995	9/8/1995		$50,000	$0	LEGISLATIVE OVERSIGHT SVCS - Contract expired 90-8-95. Kr was Lori E. Bamberger
Total Contracts having Status	Active/In Closeou 2		Totals under	Active/In Closeout		$4,826,865	$1,280,332	
Total Awarded Contracts	167				Totals	$991,848,724	$312,565,705	

Report Criteria

Contracts having Award Date >= 01/01/1901 AND Award Date <= 06/05/2000 Contracting Activity = OFFICE OF PROCUREMENT AND CONTRACTS (HQ) AND Customer DOCS Code = H AND Status is Any Active Status (Codes 1-3)

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
HUD PROCUREMENT SYSTEM (HPS)

DATE: Jun 12, 2000
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INACTIVE CONTRACTS SUMMARY REPORT

REPORTING PERIOD: FROM 01/01/1901 TO 06/12/2000

OFFICE OF PROCUREMENT AND CONTRACTS (HQ)

Inactive/Cancelled

CONTRACT NO. / CONTRACTOR	CUSTOMER DOCS	GTR NAME/ SPECIALIST	AWARD DATE / SERVICE TYPE	COMPLETION DATE	LAST COMPLETION DATE	VALUE AMOUNT	OBLIGATED AMOUNT	DESCRIPTION
P-OPC-21311	H	DEPALMO, CHUCK PEREZ, DENA	3/1/1999 CONSTRUCTION/REPAIR	5/28/1999		$17,252	$0	Construction Repair - 518 project
C-OPC-21038 BIRD PROPERTY MANAGEMENT	H	WENDER, ANITA M	5/1/1997 REAM	4/30/1998	4/30/2000	$800,000	$0	Request for contract for REAM services - REO Orlando
Total Contracts having Status	Inactive/Cancelled 2		Totals under	Inactive/Cancelled		$817,252	$0	

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
HUD PROCUREMENT SYSTEM (HPS)

DATE: Jun 12, 2000
1:54 PM

INACTIVE CONTRACTS SUMMARY REPORT

REPORTING PERIOD: FROM 01/01/1901 TO 06/12/2000

OFFICE OF PROCUREMENT AND CONTRACTS (HQ)

Inactive/Closed

CONTRACT NO. / CONTRACTOR	CUSTOMER DOCS	GTR NAME/ SPECIALIST	AWARD DATE / SERVICE TYPE	COMPLETION DATE	LAST COMPLETION DATE	VALUE AMOUNT	OBLIGATED AMOUNT	DESCRIPTION
C-OPC-18511	H	AMMONS-BARNETT, (A.	12/12/1995	9/30/1996	12/12/1996	$624,284	$277,756	LEGAL ENFORCEMENT SERVICE
C-OPC-18437	H	CHESLEY, C. VICTORIA	9/30/1995	4/30/1996		$2,565,162	$0	ANALYSIS OF THE FUTURE OPRATING ENV OF FHA
C-OPC-20014	H	CHESLEY, C. VICTORIA	2/12/1992	6/21/1994		$0	$0	PROPERTY DISPOSITION TRANSFER AWARD/-M1
C-OPC-20015	H	CHESLEY, C. VICTORIA	2/24/1992	2/24/1994		$0	$0	PROPERTY DISPOSITION TRANSFER AWARD/-M1
C-OPC-18157	H	GANTT, ELOISE F	3/26/1993	6/26/1997		$40,125	$0	0ADVISORY SVCS FOR HOSPITAL/WORKOUT/DISPOSITION
C-OPC-16600	H	HALL, LAVERNE L	1/3/1991	12/31/1995		$0	$0	USED & REPOSSESSED MANUFACTURE HOME APPRASL SVC
C-OPC-16009	H	JONES, SAMUEL A	9/28/1990	9/27/1995	9/27/1995	$2,150,506	$0	FHA FINANCIAL AUDIT
C-OPC-20010	H	KITAHARA, KENNETH	1/28/1992	1/27/1994		$0	$0	PROPERTY DISPOSITION TRANSFER AWARD/-M1
C-OPC-20011	H	KITAHARA, KENNETH	12/23/1991	12/23/1994		$0	$0	PROPERTY DISPOSITION TRANSFER AWARD/-M1
C-OPC-20012 MILLSAP, SINGER&DUNN	H	KITAHARA, KENNETH	4/8/1992	4/7/1995		$0	$0	PROPERTY DISPOSITION TRANSFER AWARD/-M1

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
HUD PROCUREMENT SYSTEM (HPS)

DATE: Jun 12, 2000
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INACTIVE CONTRACTS SUMMARY REPORT

REPORTING PERIOD: FROM 01/01/1901 TO 06/12/2000

OFFICE OF PROCUREMENT AND CONTRACTS (HQ)

Inactive/Closed

CONTRACT NO. CONTRACTOR	CUSTOMER DOCS	GTR NAME/ SPECIALIST	AWARD DATE SERVICE TYPE	COMPLETION DATE	LAST COMPLETION DATE	VALUE AMOUNT	OBLIGATED AMOUNT	DESCRIPTION
C-OPC-20013	H	KITAHARA, KENNETH	2/5/1992	2/4/1994		$0	$0	PROPERTY DISPOSITION TRANSFER AWARD/-M1
C-OPC-20018	H	KITAHARA, KENNETH	4/8/1992	6/7/1994		$0	$0	PROPERTY DISPOSITION TRANSFER AWARD/-M1
Total Contracts having Status	Inactive/Closed	12	Totals under	Inactive/Closed		$5,380,077	$277,756	

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
HUD PROCUREMENT SYSTEM (HPS)

DATE: Jun 12, 2000
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INACTIVE CONTRACTS SUMMARY REPORT

REPORTING PERIOD: FROM 01/01/1901 TO 06/12/2000

OFFICE OF PROCUREMENT AND CONTRACTS (HQ)

Inactive/Pre Award

CONTRACT NO. / CONTRACTOR	CUSTOMER DOCS	GTR NAME/ SPECIALIST	AWARD DATE / SERVICE TYPE	COMPLETION DATE	LAST COMPLETION DATE	VALUE AMOUNT	OBLIGATED AMOUNT	DESCRIPTION
C-OPC-21476 FEDERAL ASSET ADVISORY COMPANY	H	WEBB, PETER W ALLEN, JOSHULYN (FA	6/28/1999	12/28/1999		$1,230,000	$480,000	GS Contract GS-23F-H0003, Financial Advisory Services for assistance in implemen
I-OPC-21351 U. S. DEPT OF TREASURY	H	BAUMAN, DENISE J HALL, LAVERNE L	3/5/1999	3/31/2000	9/30/1999	$673,000	$673,000	Maintain FHA Debentures Automated System
I-OPC-21709 FEDERAL RESERVE BANK OF MINNEAPOLIS	H	GLASPIE, BRENDA L JOHNSON, LAURA D	6/9/2000	6/8/2001	6/8/2001	$337,660	$0	HOME MORTGAGE DISCLOSURE ACT (HMDA)
C-OPC-21292 METTERS INDUSTRIES, INC.	H	BLANK, SELECTION ROBERTSON, GAIL L	4/11/2000	4/10/2001	4/10/2001	$1,973,523	$1,890,311	gsa dummy contract - metters Request to set up a contract to be used for comp
C-OPC-21584	H	DORSEY, DENNIS O SHALL, DARYL A	12/21/1999	12/20/2000	12/20/2000	$300,000	$0	Recruitment Services / commericial Buy
Total Contracts having Status	Inactive/Pre Awar	5	Totals under	Inactive/Pre Award		$4,514,183	$3,043,311	

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
HUD PROCUREMENT SYSTEM (HPS)

DATE: Jun 12, 2000
1:54 PM

INACTIVE CONTRACTS SUMMARY REPORT

REPORTING PERIOD: FROM 01/01/1901 TO 06/12/2000

OFFICE OF PROCUREMENT AND CONTRACTS (HQ)

Inactive/Term. Default

CONTRACT NO. / CONTRACTOR	CUSTOMER DOCS	GTR NAME/ SPECIALIST	AWARD DATE / SERVICE TYPE	COMPLETION DATE	LAST COMPLETION DATE	VALUE AMOUNT	OBLIGATED AMOUNT	DESCRIPTION
C-OPC-18266	H	CHABOT, GEORGE B	2/14/1994	2/14/1997		$8,852,000	$0	REVIEW OF ANNUAL FINANCIAL STATEMENTS
Total Contracts having Status	Inactive/Term. Def	1	Totals under	Inactive/Term. Default		$8,852,000	$0	
Total Inactive Contracts	20				Totals	$19,563,512	$3,321,067	

Report Criteria

Contracts having Award Date >= 01/01/1901 AND Award Date <= 06/12/2000 Contracting Activity = OFFICE OF PROCUREMENT AND CONTRACTS (HQ) AND Customer DOCS Code = H AND Status is Any Inactive Status (Codes 0, 4-8)

HUD STAFFING

Question. Mr. Secretary, HUD has a very old and expensive workforce which has gone from 12,000 employee in 1995 to 9,100 today. In 1995, the average cost per FTE was $58,000. The cost per FTE then rose to $78,000 by the end of 2000.

Mr. Secretary, I think you know how unhappy I am with HUD's lack of capacity to administer its programs. I also believe there is a tremendous need to ensure that staff capacity is tied to program needs. Please identify the specific components which make up the growth in FTE costs in each fiscal year from 1995 through fiscal year 2000.

Answer. Like most Federal agencies, HUD has undergone increased FTE costs due, in part, to natural changes in the workforce. The Agency has incurred increased costs as a result of the following responsibilities and obligations as a Federal employer:

Employee Benefits

Cost of Living Adjustments.

	Percent
1995	2
1996	2
1997	2.3
1998	2.3
1999	3.1
2000	3.8

Spending for health benefits continues to grow.

Increasing numbers of HUD's staff are covered under the Federal Employees Retirement System (FERS). These costs to the Agency are more significant due to the 1 percent agency contribution and the government matching funds for employee contributions to the Thrift Savings Plan (TSP).

Employee Transit Subsidy.

Quality Step Increases for employee recognition.

In general, employees are working longer.

Legislative Mandate for Office of Multifamily Housing Assistance Restructuring (OMHAR)

As of May 2000, OMHAR has 82 staff onboard. Pay is Administratively Determined (AD) at a rate that is significantly higher than the General Schedule.

Question. What does HUD plan to do to address the growing costs of FTE's at HUD as well as the need to develop a young infrastructure of staff that will grow with HUD's programs?

Answer. We have established and implemented a Departmental Succession Plan which focuses heavily on targeting critical position needs and filling those positions with available qualified staff from within, utilizing in particular, staff in developmental programs. We are encouraging managers and supervisors to identify more positions for developmental opportunities so that aspiring employees, demonstrating a potential for more challenging assignments, may advance to address the Department's future critical needs. We are using more targeted recruitment for external hiring. We also are encouraging managers to examine and reengineer positions to capture the most essential job elements and maximize the performance of the work at the lowest grade levels. We are continuing to support the Agency's ability to exercise the Voluntary Early Out Retirement Authority, as well as, reconsidering the benefits of another Buyout Program.

To ensure that the appropriate talent exists to carry out HUD's revitalized mission, well into the future, executives, managers, and supervisors have examined the human potential of their organizations. We are actively developing an increased capacity by utilizing several key programs and staffing activities. A majority of the candidates for these programs represent a developing younger infrastructure of staff within the Department.

For entry level positions, the Welfare to Work Program has yielded over 200 hires (Worker Trainees). Immediately, these hires were assigned to fill much-needed clerical support positions and placed in an extensive training and development program. By providing high quality training and skills development opportunities, we expect these employees will build their skills and be committed to working for the Department well into the 21st century.

Also, to ensure a steady recruitment source of candidates for worker trainee positions, HUD supports a strong Work Experience Program. Under this program, candidates volunteer to work in the Department to gain experience in various clerical and office management functions. These volunteer opportunities prepare them to

compete for entry level positions. This program has attracted a younger cadre of interested candidates, many of whom have subsequently joined the HUD staff as permanent hires.

The Bridge Positions Program provides advance opportunities for employees who have completed the Worker Trainee Development program. Through merit staffing, this program offers career progression from GS–4 into one-grade interval positions at GS–5/6/7. Typical positions include office automation assistants; management assistants; program assistants; and personnel assistants.

The Professional Development Institute for HUD Assistants provides opportunities for HUD Assistants and other staff in developmental positions to gain technical skills for advancement into non-clerical technical positions. Established in 1997, this program has been both successful and rewarding for 1,215 employees who were committed and motivated for advancement (815 Assistants; 200 Upward Mobility candidates; and 200 Worker Trainees).

The Upward Mobility Program provides opportunities for existing staff with clerical and technical one-grade interval positions to move into more responsible two-grade interval positions. Since 1998, HUD has filled 209 upward mobility positions and 73 candidates have graduated the program into targeted positions.

The Leadership Development Program for executives, managers and supervisors strengthens their ability to lead and manage in an agency undergoing dynamic and constant change as a result of HUD 2020 reforms. This program also contains a module for aspiring managers and supervisors. It allows eligible employees, with leadership potential, to develop core competencies and team building skills.

The new Senior Executive Service Candidacy Program will prepare a cadre of managers for executive level assignment in HUD's most responsible career positions.

The current Staffing 2000 Initiative is a major recruitment effort to attract highly qualified candidates for permanent employment with the Department. Approximately 700 full time positions, in a wide range of administrative and professional series occupations, will be filled throughout the Department. The recruitment outreach was very broad, and it is likely that these employment opportunities will draw more staff for a younger infrastructure.

Finally, as part of succession planning, using the above training programs, HUD is developing career paths for qualified employees to move from entry level positions into responsible specialist and leadership positions. These career development opportunities will be very attractive for workers who are far from retirement and seeking both permanence and longevity in a Federal career.

Question. Also, for the record, please provide a 5 year comparison of staffing by GS level, salary, office and job responsibility.

Answer. An attachment has been provided that provides a 5-year comparison of staffing by GS level, salary, office and job responsibility.

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-1
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-01	2	7	8	44	73
G-02	4	18	10	45	28
G-03	24	30	16	54	47
G-04	205	148	69	56	112
G-05	715	510	309	188	141
G-06	880	450	255	165	107
G-07	919	1343	1310	1135	1068
G-08	124	121	106	91	85
G-09	410	346	339	383	290
G-10	40	45	46	55	50
G-11	979	573	513	436	444
G-12	3677	3683	3300	2890	2827
G-13	1443	1628	1681	1761	1815
G-14	861	888	851	965	1077

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-1
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-15	555	569	539	651	850
*BLUE	16	15	13	9	10
*SRES	103	94	104	100	93
*SREX	9	11	6	6	9
OTHER	.	.	.	.	36
TOTAL	10966	10479	9475	9034	9162

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMIN

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-01	1	3	6	4	3
G-02	.	7	3	7	1
G-03	4	12	5	7	10
G-04	27	18	11	5	14
G-05	71	45	33	18	16
G-06	61	60	37	24	15
G-07	109	111	131	111	85
G-08	28	21	14	12	7
G-09	58	45	52	68	38
G-10	5	6	5	5	5
G-11	128	68	62	61	51
G-12	246	203	202	176	131
G-13	124	126	129	123	113
G-14	78	86	71	68	56
G-15	49	41	32	28	44
*BLUE	16	15	13	9	10
*SRES	9	7	8	6	6
*SREX	1	1	1	.	.
*TOTAL ADMIN	1015	875	815	732	605

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-01	1	3	6	4	3
G-02	.	7	3	7	1
G-03	4	12	5	7	10
G-04	27	18	11	5	14
G-05	71	45	33	18	16
G-06	61	60	37	24	15
G-07	109	111	131	111	85
G-08	28	21	14	12	7
G-09	58	45	52	68	38
G-10	5	6	5	5	5
G-11	128	68	62	61	51
G-12	246	203	202	176	131
G-13	124	126	129	123	113
G-14	78	86	71	68	56
G-15	49	41	32	28	44
*BLUE	16	15	13	9	10
*SRES	9	7	8	6	6
*SREX	1	1	1	.	.
*TOTAL ADMIN	1015	875	815	732	605

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CFO

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-01	.	.	.	4	16
G-02	.	4	.	4	9
G-03	6	.	.	9	12
G-04	5	1	4	17	30
G-05	9	10	12	4	4
G-06	45	40	18	11	5
G-07	51	52	64	32	23
G-08	6	6	4	3	4
G-09	9	3	6	10	9
G-10	1	1	1	2	2
G-11	45	41	34	9	11
G-12	105	98	75	36	32
G-13	64	67	74	59	58
G-14	38	34	39	33	36
G-15	18	19	21	28	24
*SRES	5	3	4	4	4
*SREX	.	1	.	1	.
*TOTAL CFO	407	380	356	266	279

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CIO

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-07	.	.	.	.	1
G-10	.	.	.	.	1
G-14	.	.	.	.	1
G-15	.	.	.	.	2
*SRES	.	.	.	.	1
*TOTAL CIO	0	0	0	0	6

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-01	.	.	.	1	4
G-02	.	.	.	6	.
G-03	2	1	2	10	2
G-04	7	5	8	5	10
G-05	46	36	19	19	10
G-06	44	35	26	24	16
G-07	59	66	74	90	92
G-08	2	12	11	9	8
G-09	20	20	22	38	32
G-10	3	5	1	3	2
G-11	12	14	19	20	32
G-12	350	349	321	300	297
G-13	167	151	161	143	153
G-14	86	85	82	88	91
G-15	59	61	50	46	70
*SRES	10	8	6	8	4
*SREX	1	1	.	1	1
*TOTAL CPD	868	849	802	811	824

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPO

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-05	.	.	.	.	1
G-07	.	.	.	.	17
G-08	.	.	.	.	1
G-09	.	.	.	.	5
G-11	.	.	.	.	18
G-12	.	.	.	.	35
G-13	.	.	.	.	25
G-14	.	.	.	.	20
G-15	.	.	.	.	4
*SRES	.	.	.	.	3
*TOTAL CPO	0	0	0	0	129

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN DEC

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-01	.	.	.	.	1
G-05	.	.	.	3	2
G-06	.	.	.	1	.
G-07	.	.	.	7	12
G-08	.	.	.	2	7
G-09	.	.	.	5	4
G-10	.	.	.	2	1
G-11	.	.	.	3	1
G-12	.	.	.	14	12
G-13	.	.	.	43	56
G-14	.	.	.	25	32
G-15	.	.	.	20	21
*SRES	.	.	.	1	3
*TOTAL DEC	0	0	0	126	152

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN DREAC

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-05	.	.	.	.	6
G-07	.	.	.	8	10
G-08	.	.	.	2	2
G-09	.	.	.	3	3
G-11	.	.	.	4	5
G-12	.	.	.	8	15
G-13	.	.	.	28	61
G-14	.	.	.	15	39
G-15	.	.	.	15	24
*SRES	.	.	.	.	2
*TOTAL DREAC	0	0	0	83	167

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN FHEO

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-01	.	.	.	2	.
G-03	1	.	.	1	.
G-04	17	11	3	4	5
G-05	42	21	19	8	7
G-06	33	41	26	22	16
G-07	36	41	50	74	70
G-08	9	6	7	4	2
G-09	31	25	19	16	11
G-10	3	3	2	3	4
G-11	35	30	25	13	10
G-12	244	235	228	253	247
G-13	101	99	101	104	97
G-14	76	88	87	77	75
G-15	46	49	45	44	40
*SRES	8	8	9	8	7
*SREX	.	1	.	1	1
*TOTAL FHEO	682	658	621	634	592

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GEN CN

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-01	.	.	.	.	5
G-02	.	.	.	4	1
G-03	.	.	.	2	3
G-04	5	7	4	1	9
G-05	15	12	11	3	3
G-06	21	14	9	3	3
G-07	39	35	33	24	25
G-08	20	20	20	15	13
G-09	20	19	21	18	19
G-10	11	9	11	12	11
G-11	35	41	27	29	15
G-12	30	19	25	19	30
G-13	100	110	110	76	62
G-14	128	127	124	133	140
G-15	86	84	84	70	72
*SRES	10	9	12	10	11
*SREX	1	1	.	1	1
*TOTAL GEN CNSL	521	507	491	420	423

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GNMA

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-01	.	.	.	.	1
G-05	.	.	.	.	1
G-06	2	2	3	.	.
G-07	4	5	4	6	5
G-08	.	.	1	1	1
G-09	5	4	2	1	1
G-10	1	1	2	1	.
G-11	4	4	3	4	4
G-12	5	3	2	2	2
G-13	18	19	19	18	17
G-14	10	12	13	11	13
G-15	10	9	9	6	8
*SRES	5	3	5	5	5
*SREX	1	1	1	.	.
*TOTAL GNMA	65	63	64	55	58

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-01	1	4	1	11	2
G-02	3	4	1	14	7
G-03	9	14	3	13	4
G-04	113	84	23	10	23
G-05	491	348	184	92	50
G-06	559	202	100	53	26
G-07	452	830	755	518	493
G-08	33	30	21	16	14
G-09	214	167	149	127	64
G-10	4	6	8	8	8
G-11	654	321	287	206	201
G-12	1922	2032	1789	1419	1384
G-13	541	710	717	692	685
G-14	269	276	253	226	212
G-15	120	128	119	105	110
*SRES	15	15	15	12	10
*SREX	1	1	1	.	1
*TOTAL HOUSING	5401	5172	4426	3522	3294

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ODEEC

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-02	.	1	.	.	.
G-06	2	.	.	.	.
G-07	2	2	2	.	.
G-08	1	.	.	2	2
G-09	.	1	1	1	.
G-10	.	.	.	1	.
G-11	.	.	.	.	3
G-12	1	1	1	1	1
G-13	6	10	11	10	8
G-14	1	1	1	1	2
G-15	3	3	3	3	4
*SRES	2	2	1	1	.
*TOTAL ODEEO	18	21	20	20	20

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN OLHC

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-06	1	1	1	.	.
G-07	2	3	2	2	2
G-09	1	1	2	1	2
G-11	.	.	2	1	.
G-12	.	1	1	3	3
G-13	9	10	11	10	11
G-14	4	5	4	2	3
G-15	4	3	2	2	3
*SRES	2	2	2	2	2
*TOTAL OLHC	23	26	27	23	26

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN OMHA

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
*SREX	.	.	.	.	1
OTHER	.	.	.	.	36
*TOTAL OMHAR	0	0	0	0	37

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PDR

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-01	.	.	.	1	.
G-02	.	.	.	.	1
G-03	.	.	1	.	.
G-06	1	1	1	1	1
G-07	9	8	10	8	6
G-08	4	4	4	4	5
G-09	5	5	4	7	3
G-10	2	2	2	1	1
G-11	4	4	6	4	10
G-12	8	6	7	7	17
G-13	19	17	15	14	37
G-14	31	32	33	33	44
G-15	22	22	22	20	24
*SRES	5	4	4	4	4
*SREX	1	1	.	.	.
*TOTAL PDR	111	106	109	104	153

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
G-01	.	.	.	11	2
G-02	1	1	2	3	3
G-03	1	2	.	6	10
G-04	24	14	12	10	10
G-05	29	23	16	13	11
G-06	81	33	21	15	15
G-07	93	124	118	115	116
G-08	4	7	10	9	7
G-09	29	35	23	24	25
G-10	5	7	9	8	9
G-11	40	34	31	59	60
G-12	701	673	595	548	526
G-13	229	249	270	314	294
G-14	98	96	91	110	123
G-15	62	64	60	60	83
*SRES	9	10	8	10	6
*SREX	1	.	.	.	1
*TOTAL PIH	1407	1372	1266	1315	1301

REPORT: FYPASSN2 P.P. END: RUN DATE: 06/26/00 PART-2
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN

GRADE GROUP	*FY* 1995	1996	1997	1998	1999
TOTAL	10966	10479	9475	9034	9162

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
OFC SEC	G-01	.	.	1	1	1
	G-02	.	1	4	1	.
	G-03	1	1	4	1	.
	G-04	.	4	2	1	.
	G-05	.	.	3	3	2
	G-06	.	.	.	1	1
	G-07	1	.	1	.	.
	G-08	4	1	3	2	1
	G-09	4	7	8	8	5
	G-10	5	4	4	7	5
	G-11	7	4	5	5	7
	G-12	4	7	3	1	.
	G-13	1	1	3	4	5
	G-14	9	7	5	5	6
	G-15	11	14	10	11	6
	*SRES	12	13	17	17	14
	*SREX	1	2	2	1	2
*TOTAL ADMIXOFC	OFC SEC	60	66	75	69	55
CIR	G-06	1	1	1	1	.
	G-07	2	2	2	1	3
	G-08	4	2	2	3	2
	G-09	.	2	3	2	2
	G-11	4	1	2	1	2
	G-12	.	3	3	3	1
	G-13	4	5	4	4	5
	G-14	1	1	3	4	5
	G-15	8	9	9	6	5
	*SRES	2	.	1	2	1
	*SREX	.	1	1	1	1
*TOTAL ADMIXOFC	CIR	26	27	31	28	27
ODOC	G-05	.	.	.	1	.
	G-06	.	.	.	.	1

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM'

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
ODOC	G-08	.	.	.	1	.
	G-09	.	.	1	1	2
	G-11	.	.	.	.	2
	G-13	.	.	1	.	1
	G-14	.	.	1	5	5
	G-15	.	.	11	8	14
	*SRES	.	.	1	1	1
*TOTAL ADMIXOFC	ODOC	0	0	15	17	26
PUB AFFR	G-07	.	.	.	1	1
	G-08	1	.	.	.	.
	G-09	1	1	1	4	2
	G-10	.	.	.	1	.
	G-11	1	1	.	.	1
	G-12	3	3	2	1	1
	G-13	1	2	2	5	3
	G-14	4	3	3	10	1
	G-15	5	3	6	8	5
	*SRES	.	1	.	1	.
	*SREX	1	.	.	.	.
*TOTAL ADMIXOFC	PUB AFFR	17	14	14	31	14
ALBANY	G-06	2	1	1	1	1
	G-07	.	1	1	1	2
	G-13	.	.	.	3	3
	G-15	1	1	1	2	4
*TOTAL ADMIXOFC	ALBANY	3	3	3	7	10
ALBQRQUE	G-01	.	.	.	.	1
	G-05	.	1	.	.	.
	G-06	.	.	1	1	.

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
ALBQRQUE	G-07	.	.	.	.	1
	G-09	.	.	.	1	1
	G-12	1	.	.	.	.
	G-13	.	.	1	.	.
	G-14	1	.	.	.	1
	G-15	.	1	1	3	4
*TOTAL ADMIXOFC ALBQRQUE		2	2	3	5	8
ANCHRAGE	G-01	.	.	.	.	1
	G-05	1	1	1	1	.
	G-07	1	1	.	.	.
	G-09	.	.	.	1	1
	G-14	.	.	.	1	1
	G-15	1	1	1	2	2
*TOTAL ADMIXOFC ANCHRAGE		3	3	2	5	5
ATLANTA	G-01	.	.	.	.	1
	G-02	.	.	.	1	.
	G-05	.	.	.	1	2
	G-06	1	1	.	.	.
	G-07	6	6	6	6	6
	G-09	1	1	1	1	1
	G-11	2	1	1	1	1
	G-12	7	9	9	12	11
	G-13	4	4	4	6	5
	G-14	3	3	3	3	2
	G-15	3	3	3	6	9
	*SRES	1	1	2	1	1
*TOTAL ADMIXOFC ATLANTA		28	29	29	38	39
BALTIMOR	G-04	1	.	.	.	.

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
BALTIMOR	G-05	.	1	1	1	3
	G-07	2	2	1	3	1
	G-08	.	.	.	.	1
	G-09	.	.	.	.	1
	G-11	.	.	.	1	.
	G-12	1	1	1	.	1
	G-13	1	1	1	.	1
	G-14	.	.	.	3	4
	G-15	1	1	.	4	5
*TOTAL ADMIXOFC BALTIMOR		6	6	4	12	17
BANGOR	G-07	.	.	.	2	1
	G-09	.	.	.	.	1
	G-14	.	.	.	.	1
	G-15	.	.	.	1	1
*TOTAL ADMIXOFC BANGOR		0	0	0	3	4
BOISE	G-06	1	.	.	.	.
	G-07	.	1	1	1	1
	G-12	.	.	.	1	1
	G-14	.	1	1	.	.
	G-15	.	.	.	2	2
*TOTAL ADMIXOFC BOISE		1	2	2	4	4
BOSTON	G-05	.	1	.	.	.
	G-06	2	2	1	.	.
	G-07	2	.	1	1	.
	G-08	.	2	.	.	.
	G-09	.	.	2	3	3
	G-11	1	1	1	.	1
	G-12	3	3	3	6	3

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
BOSTON	G-13	3	2	2	3	3
	G-14	1	2	2	1	2
	G-15	1	.	.	3	10
	*SRES	1	1	1	1	2
*TOTAL ADMIXOFC BOSTON		14	14	13	18	24
BRMNGHAM	G-05	1	1	1	.	.
	G-07	1	1	1	2	1
	G-13	1	1	1	3	1
	G-14	.	.	.	.	3
	G-15	1	1	1	2	4
*TOTAL ADMIXOFC BRMNGHAM		4	4	4	7	9
BUFFALO	G-04	1	.	.	.	.
	G-05	.	1	1	1	1
	G-07	2	2	3	7	5
	G-09	.	.	.	1	1
	G-12	2	2	2	4	4
	G-13	3	2	2	4	4
	G-14	.	.	.	3	3
	G-15	.	1	1	.	2
*TOTAL ADMIXOFC BUFFALO		8	8	9	20	20
BURLGTN	G-07	.	.	.	.	1
	G-14	.	.	.	1	1
	G-15	.	.	.	.	1
*TOTAL ADMIXOFC BURLGTN		0	0	0	1	3

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
CAMDEN	G-02	.	.	.	.	1
	G-03	.	.	1	1	.
	G-07	.	.	.	.	1
	G-12	.	.	.	1	1
	G-13	.	.	.	1	1
	G-14	1	1	1	1	2
	G-15	.	.	.	3	3
*TOTAL ADMIXOFC CAMDEN		1	1	2	7	9
CASPER	G-07	.	.	.	3	2
	G-09	.	.	.	.	1
	G-13	.	.	.	.	1
	G-14	.	.	1	.	1
	G-15	.	.	.	1	.
*TOTAL ADMIXOFC CASPER		0	0	1	4	5
CHARLSTN	G-06	.	.	.	.	1
	G-07	.	1	1	1	1
	G-09	.	.	.	1	1
	G-13	.	.	.	.	1
	G-14	.	.	.	2	2
	G-15	.	1	1	1	1
*TOTAL ADMIXOFC CHARLSTN		0	2	2	5	7
CHICAGO	G-05	1	.	.	3	3
	G-06	2	2	.	.	.
	G-07	1	.	.	11	11
	G-08	.	1	1	.	.
	G-09	1	1	1	2	2
	G-11	1	1	1	1	1
	G-12	3	2	2	5	3

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
CHICAGO	G-13	1	.	.	2	4
	G-14	4	4	2	6	7
	G-15	.	.	.	6	11
	*SRES	1	1	1	.	.
*TOTAL ADMIXOFC CHICAGO		15	12	8	36	42
CLEVELND	G-04	1	.	.	.	.
	G-05	.	1	1	2	2
	G-07	1	1	.	3	2
	G-09	1	.	1	2	1
	G-11	1	2	1	2	2
	G-13	.	.	.	1	2
	G-14	.	.	.	2	3
	G-15	.	1	1	3	5
*TOTAL ADMIXOFC CLEVELND		4	5	4	15	17
CNCINATI	G-01	.	.	.	.	1
	G-06	.	1	.	.	.
	G-07	.	.	1	.	.
	G-09	.	.	.	1	1
	G-11	1	1	1	1	.
	G-12	.	.	.	3	3
	G-13	.	.	.	1	1
	G-14	.	.	.	2	3
	G-15	1	1	.	1	1
*TOTAL ADMIXOFC CNCINATI		2	3	2	9	10
COLUMBIA	G-02	.	.	.	1	.
	G-03	.	.	.	.	1
	G-05	.	.	.	.	1
	G-07	.	1	1	2	1

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
COLUMBIA	G-12	.	.	.	1	1
	G-13	1	1	1	1	1
	G-15	1	1	.	3	5
*TOTAL ADMIXOFC COLUMBIA		2	3	2	8	10
COLUMBUS	G-01	.	.	.	.	2
	G-07	.	.	2	.	.
	G-09	.	.	.	1	1
	G-11	1	1	1	.	.
	G-12	4	4	4	4	2
	G-13	1	1	1	2	1
	G-14	.	.	.	2	2
	G-15	1	1	1	3	5
*TOTAL ADMIXOFC COLUMBUS		7	7	9	12	13
CORAL GB	G-05	.	.	.	1	1
	G-07	1	1	.	2	1
	G-08	.	.	1	1	.
	G-09	.	.	.	.	1
	G-12	.	.	.	2	1
	G-13	.	.	.	1	2
	G-14	.	.	1	2	3
	G-15	1	1	1	2	7
*TOTAL ADMIXOFC CORAL GB		2	2	3	11	16
DALLAS	G-06	2	1	.	.	.
	G-07	.	.	1	2	2
	G-12	1	.	.	1	1
	G-13	.	.	.	2	5
	G-14	1	1	1	2	2
	G-15	.	.	.	1	2

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
*TOTAL ADMIXOFC DALLAS		4	2	2	8	12
DENVER	G-05	.	.	1	.	.
	G-06	2	1	.	.	.
	G-07	1	2	1	1	1
	G-08	.	.	2	2	3
	G-09	1	1	.	1	1
	G-11	.	.	.	1	.
	G-12	3	2	1	3	4
	G-13	3	2	3	5	5
	G-14	.	1	2	3	2
	G-15	.	.	.	4	6
	*SRES	1	1	1	.	.
*TOTAL ADMIXOFC DENVER		11	10	11	20	22
DES MOIN	G-01	.	.	.	1	.
	G-02	.	.	.	.	1
	G-06	1	.	.	.	.
	G-07	.	1	1	2	1
	G-09	.	.	.	.	1
	G-12	.	.	.	1	1
	G-13	.	.	.	3	3
	G-14	.	.	.	2	1
	G-15	1	1	1	2	2
*TOTAL ADMIXOFC DES MOIN		2	2	2	11	10
DETROIT	G-01	.	.	.	2	.
	G-04	.	.	.	.	1
	G-05	.	.	.	1	2
	G-07	1	1	.	5	5
	G-08	1	.	.	.	.
	G-09	.	.	2	.	.

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
DETROIT	G-11	.	.	.	1	1
	G-12	.	1	.	1	.
	G-13	2	1	2	5	3
	G-14	.	.	.	1	2
	G-15	1	1	1	4	6
*TOTAL ADMIXOFC DETROIT		5	4	5	20	20
FARGO	G-07	.	.	.	1	1
	G-12	.	.	.	2	2
	G-14	.	1	1	.	1
*TOTAL ADMIXOFC FARGO		0	1	1	3	4
FLINT	G-07	.	.	.	1	1
	G-12	.	.	.	1	1
	G-14	.	.	.	.	2
*TOTAL ADMIXOFC FLINT		0	0	0	2	4
FRESNO	G-04	.	.	.	.	1
	G-07	.	.	.	1	1
	G-12	.	.	.	.	1
	G-13	.	.	.	.	1
	G-14	.	.	.	1	2
	G-15	.	.	.	1	2
*TOTAL ADMIXOFC FRESNO		0	0	0	3	8
FT WORTH	G-01	.	.	.	1	1
	G-04	1	1	1	1	1
	G-05	1	1	1	1	.

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
FT WORTH	G-06	1	1	1	1	1
	G-07	3	3	3	3	1
	G-08	1	2	1	.	.
	G-09	1	.	1	2	4
	G-12	3	3	3	3	2
	G-13	4	3	2	4	2
	G-14	1	2	3	8	6
	G-15	1	1	1	3	4
	*SRES	1	1	1	1	1
*TOTAL ADMIXOFC FT WORTH		18	18	18	28	23
GREENSBR	G-07	2	2	2	6	4
	G-13	1	1	2	1	1
	G-14	.	.	.	2	5
	G-15	1	1	1	1	4
*TOTAL ADMIXOFC GREENSBR		4	4	5	10	14
GRND RPD	G-05	.	.	.	1	1
	G-07	1	1	1	3	2
	G-09	.	.	.	.	1
	G-13	.	.	.	1	2
	G-15	.	.	.	2	3
*TOTAL ADMIXOFC GRND RPD		1	1	1	7	9
HARTFORD	G-06	1	.	.	.	.
	G-07	1	1	1	3	3
	G-09	.	.	.	1	1
	G-12	.	.	.	1	1
	G-13	.	1	.	.	.
	G-15	.	1	1	3	5
*TOTAL ADMIXOFC HARTFORD		2	3	2	8	10

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
HELENA	G-01	.	.	.	.	1
	G-07	1	1	1	1	1
	G-09	.	.	.	1	1
	G-13	.	.	.	1	.
	G-15	1	1	1	1	2
*TOTAL ADMIXOFC HELENA		2	2	2	4	5
HONOLULU	G-01	.	.	.	1	.
	G-02	.	.	.	.	1
	G-07	1	1	1	1	.
	G-08	.	.	.	.	1
	G-09	.	.	.	1	.
	G-12	.	.	.	.	1
	G-13	.	.	.	1	1
	G-14	.	.	.	1	1
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC HONOLULU		2	2	2	6	6
HOUSTON	G-01	.	.	.	1	.
	G-03	.	.	.	.	1
	G-07	.	1	1	5	6
	G-09	.	.	.	1	1
	G-12	.	.	.	1	1
	G-13	.	.	.	1	3
	G-14	1	1	1	4	6
	G-15	.	.	.	1	2
*TOTAL ADMIXOFC HOUSTON		1	2	2	14	20
INDNAPLS	G-05	.	.	.	1	1
	G-06	1	1	1	.	.
	G-07	2	1	1	2	2

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
INDNAPLS	G-09	.	1	1	2	2
	G-12	1	1	1	1	1
	G-13	1	1	1	2	4
	G-14	.	.	.	2	2
	G-15	1	1	1	2	5
*TOTAL ADMIXOFC INDNAPLS		6	6	6	12	17
JACKSNVL	G-01	.	.	.	.	1
	G-07	1	1	1	2	1
	G-09	.	.	.	.	1
	G-12	2	2	2	2	.
	G-13	1	1	1	1	.
	G-14	1	1	1	1	2
	G-15	1	1	1	3	4
*TOTAL ADMIXOFC JACKSNVL		6	6	6	9	9
JACKSON	G-01	.	.	.	.	1
	G-05	.	.	.	.	1
	G-07	1	1	1	4	2
	G-09	.	.	.	.	1
	G-13	1	.	.	.	.
	G-14	1	1	1	2	2
	G-15	.	1	1	3	4
*TOTAL ADMIXOFC JACKSON		3	3	3	9	11
KAN CITY	G-01	.	.	.	.	1
	G-02	.	.	.	.	1
	G-03	.	.	.	.	1
	G-05	1	1	.	.	.
	G-07	2	3	3	4	2
	G-08	.	.	.	.	2

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
KAN CITY	G-09	1	.	.	1	1
	G-10	.	1	1	1	1
	G-12	1	1	1	1	1
	G-13	3	3	3	3	4
	G-14	1	1	1	3	3
	G-15	1	1	2	2	4
	*SRES	1	.	.	.	.
*TOTAL ADMIXOFC KAN CITY		11	11	11	15	21
KNOXVLLE	G-02	.	.	.	.	1
	G-07	.	1	.	1	1
	G-14	1	1	1	1	1
	G-15	.	.	.	2	3
*TOTAL ADMIXOFC KNOXVLLE		1	2	1	4	6
L. A.	G-03	.	.	.	1	.
	G-04	.	.	.	.	1
	G-05	3	1	.	.	.
	G-06	.	1	2	1	1
	G-07	2	2	2	1	1
	G-09	.	.	.	1	1
	G-11	2	2	2	2	2
	G-12	2	2	1	1	1
	G-13	1	.	1	5	6
	G-14	.	1	1	4	4
	G-15	2	1	1	2	8
	*SRES	.	.	.	1	1
*TOTAL ADMIXOFC L. A.		12	10	10	19	26
LAS VGAS	G-03	.	.	.	1	1
	G-07	.	1	1	2	2

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
LAS VGAS	G-09	.	.	.	1	1
	G-12	.	.	.	1	1
	G-13	.	.	.	1	1
	G-14	.	.	.	1	1
	G-15	1	1	1	3	7
*TOTAL ADMIXOFC LAS VGAS		1	2	2	10	14
LOUISVL	G-01	.	.	.	.	1
	G-06	1	.	.	.	.
	G-07	.	1	1	2	1
	G-12	.	.	.	1	1
	G-13	.	.	.	1	1
	G-14	.	.	.	1	3
	G-15	1	.	.	2	2
*TOTAL ADMIXOFC LOUISVL		2	1	1	7	9
LTL ROCK	G-01	.	.	.	.	1
	G-06	.	1	.	.	.
	G-07	.	.	.	2	1
	G-09	.	.	.	.	1
	G-11	1	.	.	.	.
	G-12	1	1	1	1	1
	G-13	.	1	1	.	.
	G-14	.	.	.	2	2
	G-15	1	2	1	2	2
*TOTAL ADMIXOFC LTL ROCK		3	5	3	7	8
LUBBOCK	G-01	.	.	.	.	1
	G-06	1	.	.	.	.
	G-09	.	.	.	1	.
	G-12	1	.	.	.	.

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
LUBBOCK	G-14	.	.	.	1	1
	G-15	.	.	.	2	2
*TOTAL ADMIXOFC LUBBOCK		2	0	0	4	4
MANCHSTR	G-06	.	1	.	.	.
	G-07	.	.	1	.	.
	G-12	.	.	.	1	1
	G-15	1	1	1	2	3
*TOTAL ADMIXOFC MANCHSTR		1	2	2	3	4
MEMPHIS	G-07	.	.	.	4	3
	G-09	.	.	.	.	1
	G-12	.	.	.	2	2
	G-14	.	.	.	1	2
	G-15	.	.	.	.	2
*TOTAL ADMIXOFC MEMPHIS		0	0	0	7	10
MIN-STPL	G-01	.	.	.	.	1
	G-06	1	.	.	.	.
	G-07	1	2	1	1	1
	G-09	.	.	1	1	1
	G-11	.	.	.	1	.
	G-12	3	2	2	2	2
	G-13	1	1	1	2	1
	G-14	.	.	.	1	2
	G-15	2	2	1	2	7
*TOTAL ADMIXOFC MIN-STPL		8	7	6	10	15

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
MLWAUKEE	G-07	1	1	1	2	1
	G-09	.	.	.	.	1
	G-12	2	2	1	1	1
	G-13	1	1	1	2	1
	G-14	.	.	.	1	2
	G-15	1	1	1	2	3
*TOTAL ADMIXOFC MLWAUKEE		5	5	4	8	9
NASHVLLE	G-01	.	.	.	.	3
	G-05	.	1	.	.	.
	G-06	.	.	1	.	.
	G-07	.	.	.	1	1
	G-09	.	.	1	1	1
	G-12	.	.	.	1	1
	G-13	.	.	.	1	1
	G-14	1	1	1	1	4
	G-15	1	1	1	4	2
*TOTAL ADMIXOFC NASHVLLE		2	3	4	9	13
NEW ORLN	G-01	.	.	.	1	1
	G-02	.	.	.	.	1
	G-05	.	.	.	1	1
	G-06	1	1	1	1	1
	G-07	2	2	2	1	.
	G-09	.	.	.	2	1
	G-11	.	.	.	.	1
	G-12	1	1	1	2	1
	G-13	1	1	1	3	2
	G-14	.	1	.	2	2
	G-15	1	1	2	3	3
*TOTAL ADMIXOFC NEW ORLN		6	7	7	16	14

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
NEW YORK	G-01	.	.	.	1	2
	G-03	.	.	.	1	.
	G-04	.	.	.	.	1
	G-05	2	1	.	.	.
	G-06	1	2	2	2	1
	G-07	1	1	1	3	2
	G-08	.	1	.	.	.
	G-09	1	1	1	1	2
	G-11	.	1	1	2	1
	G-12	1	1	1	4	5
	G-13	3	3	2	3	3
	G-14	2	2	3	9	10
	G-15	4	4	4	6	9
	*SRES	.	1	2	1	1
*TOTAL ADMIXOFC NEW YORK		15	18	17	33	37
NEWARK	G-01	.	.	.	.	2
	G-05	.	.	1	1	.
	G-06	.	.	1	.	.
	G-07	1	.	.	1	.
	G-08	1	1	.	.	1
	G-09	.	.	1	1	1
	G-12	1	.	.	.	.
	G-13	1	1	1	3	4
	G-14	.	.	.	3	3
	G-15	1	1	1	3	4
*TOTAL ADMIXOFC NEWARK		5	3	5	12	15
OKLA CTY	G-01	.	.	.	.	1
	G-07	.	1	1	.	.
	G-09	.	.	1	1	1
	G-12	1	1	1	1	1
	G-13	1	1	1	2	1
	G-14	.	.	.	1	2

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
OKLA CTY	G-15	1	2	2	2	3
*TOTAL ADMIXOFC OKLA CTY		3	5	6	7	9
OMAHA	G-02	.	.	.	1	.
	G-07	1	1	1	2	1
	G-09	.	.	.	.	1
	G-13	1	2	2	2	1
	G-14	.	.	.	1	1
	G-15	1	1	1	1	2
*TOTAL ADMIXOFC OMAHA		3	4	4	7	6
ORLANDO	G-06	1	.	.	.	.
	G-07	.	1	1	4	3
	G-09	.	.	.	.	1
	G-12	.	.	.	1	1
	G-14	1	.	.	1	2
	G-15	.	.	.	1	2
*TOTAL ADMIXOFC ORLANDO		2	1	1	7	9
PHILA	G-02	.	.	.	1	.
	G-04	.	.	.	1	2
	G-08	2	2	2	2	1
	G-09	.	.	1	1	2
	G-12	1	1	1	3	3
	G-13	3	3	2	5	4
	G-14	1	1	2	5	5
	G-15	1	1	1	4	6
	*SRES	1	1	1	1	1
*TOTAL ADMIXOFC PHILA		9	9	10	23	24

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PHOENIX	G-05	.	1	.	.	.
	G-07	.	1	1	2	1
	G-09	.	.	1	1	1
	G-11	.	.	.	1	1
	G-12	1	1	.	1	1
	G-13	.	.	.	1	1
	G-14	.	1	1	1	3
	G-15	1	1	1	4	5
*TOTAL ADMIXOFC PHOENIX		2	5	4	11	13
PITTSBRG	G-04	1	1	.	.	1
	G-05	.	.	1	1	1
	G-07	1	.	.	1	1
	G-08	1	1	1	.	.
	G-09	.	1	.	1	1
	G-11	.	.	1	.	.
	G-12	1	1	1	1	1
	G-13	1	1	1	1	1
	G-14	.	.	.	2	3
	G-15	1	1	1	3	4
*TOTAL ADMIXOFC PITTSBRG		6	6	6	10	13
PORTLAND	G-01	.	.	.	.	1
	G-04	.	.	.	1	.
	G-05	1	1	1	2	2
	G-07	1	1	.	.	.
	G-12	.	.	.	1	1
	G-13	1	1	1	2	1
	G-14	1	.	.	.	.
	G-15	.	1	1	2	4
*TOTAL ADMIXOFC PORTLAND		4	4	3	8	9

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PROVIDNC	G-01	.	.	.	.	2
	G-06	.	1	.	.	.
	G-07	.	.	1	1	.
	G-09	.	.	1	.	1
	G-11	.	.	.	1	.
	G-12	.	.	.	.	1
	G-13	.	.	.	1	1
	G-14	.	.	.	.	1
	G-15	.	1	1	1	1
*TOTAL ADMIXOFC PROVIDNC		0	2	3	4	7
PRT RICO	G-01	.	.	.	.	1
	G-07	2	1	1	2	1
	G-09	.	.	.	.	1
	G-13	1	1	1	1	1
	G-14	.	.	1	2	3
	G-15	.	1	1	4	5
*TOTAL ADMIXOFC PRT RICO		3	3	4	9	12
RENO	G-01	.	.	.	.	1
	G-07	.	.	.	.	1
	G-09	1	.	.	.	.
	G-12	.	.	.	.	2
	G-14	.	.	.	.	2
	G-15	.	.	.	1	1
*TOTAL ADMIXOFC RENO		1	0	0	1	7
RICHMOND	G-01	.	.	.	.	2
	G-05	.	.	.	.	1
	G-06	1	.	.	.	.
	G-07	2	2	1	1	.

REPORT: FYPASSN2 P.P. END: 09/27/1997 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
RICHMOND	G-08	.	.	1	1	.
	G-09	.	.	1	1	1
	G-12	1	1	1	1	1
	G-13	1	1	2	2	3
	G-14	.	.	.	1	3
	G-15	1	1	1	2	6
*TOTAL ADMIXOFC RICHMOND		6	5	7	9	17
SACRMNTO	G-01	.	.	.	.	1
	G-05	.	.	.	1	1
	G-07	1	1	.	.	.
	G-09	.	.	.	1	1
	G-12	.	.	1	.	.
	G-13	.	.	.	1	3
	G-14	.	1	1	.	.
	G-15	.	.	.	3	3
*TOTAL ADMIXOFC SACRMNTO		1	2	2	6	9
SAN DIEG	G-07	1	.	1	1	1
	G-09	.	.	.	1	.
	G-13	.	.	.	1	1
	G-14	1	1	1	1	2
	G-15	.	.	.	1	1
*TOTAL ADMIXOFC SAN DIEG		2	1	2	5	5
SAN FRAN	G-01	.	.	.	1	1
	G-03	.	.	.	1	1
	G-04	.	.	.	.	1
	G-06	1	1	.	.	.
	G-07	2	1	2	4	1
	G-08	2	2	.	.	.

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
SAN FRAN	G-09	1	.	3	1	2
	G-11	.	.	.	1	.
	G-12	2	1	1	3	4
	G-13	5	4	3	3	2
	G-14	1	1	2	4	4
	G-15	1	1	.	7	13
	*SRES	1	1	1	1	1
*TOTAL ADMIXOFC SAN FRAN		16	12	12	26	30
SEATTLE	G-02	.	.	.	1	.
	G-04	.	.	.	.	1
	G-05	1	1	1	.	.
	G-06	.	.	.	1	1
	G-07	.	.	.	.	1
	G-09	3	3	3	3	2
	G-11	.	.	.	1	.
	G-12	5	4	3	4	4
	G-13	2	2	2	4	4
	G-14	.	1	2	2	5
	G-15	2	2	2	2	3
	*SRES	1	1	1	1	1
*TOTAL ADMIXOFC SEATTLE		14	14	14	19	22
SHRVPORT	G-01	.	.	.	.	1
	G-06	1	.	.	.	.
	G-09	.	.	.	1	.
	G-12	1	.	.	.	1
	G-14	.	.	.	1	1
	G-15	.	.	.	1	3
*TOTAL ADMIXOFC SHRVPORT		2	0	0	3	6

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
SIOUX FL	G-12	.	.	.	1	1
	G-13	.	.	.	.	1
	G-14	.	.	.	1	.
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC SIOUX FL		1	1	1	3	3
SLT LAKE	G-07	1	1	1	1	2
	G-12	.	.	.	1	1
	G-13	.	.	.	2	3
	G-15	1	1	1	1	3
*TOTAL ADMIXOFC SLT LAKE		2	2	2	5	9
SN ANTON	G-05	.	.	1	4	3
	G-06	1	1	.	.	.
	G-07	2	1	1	.	.
	G-09	.	1	.	1	1
	G-12	.	.	1	2	.
	G-13	.	.	.	2	3
	G-14	.	.	.	2	6
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC SN ANTON		4	4	4	12	14
SNTA ANA	G-01	.	.	.	.	1
	G-05	.	.	.	.	1
	G-07	1	1	1	.	.
	G-09	.	.	.	1	.
	G-13	1	.	.	.	1
	G-14	.	.	.	.	2
	G-15	.	.	.	.	3
*TOTAL ADMIXOFC SNTA ANA		2	1	1	1	8

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
SPOKANE	G-04	.	.	.	.	1
	G-06	1	.	.	1	1
	G-12	.	.	.	1	1
	G-13	.	.	.	.	1
	G-15	.	.	.	1	1
*TOTAL ADMIXOFC SPOKANE		1	0	0	3	5
SPRNGFLD	G-07	.	.	.	.	1
	G-14	.	.	.	.	2
	G-15	.	.	.	2	2
*TOTAL ADMIXOFC SPRNGFLD		0	0	0	2	5
ST LOUIS	G-02	.	.	.	1	.
	G-03	.	.	.	.	1
	G-07	1	1	1	1	1
	G-12	.	.	.	1	1
	G-13	1	1	1	2	.
	G-14	1	1	1	2	4
	G-15	1	1	1	2	3
*TOTAL ADMIXOFC ST LOUIS		4	4	4	9	10
TAMPA	G-01	.	.	.	.	1
	G-07	1	1	1	2	1
	G-09	.	.	.	.	1
	G-12	.	.	.	1	1
	G-13	.	.	.	1	2
	G-14	1	1	1	1	1
	G-15	.	.	.	1	4
*TOTAL ADMIXOFC TAMPA		2	2	2	6	11

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN *DM*

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
TULSA	G-01	.	.	.	.	1
	G-04	1	1	.	.	.
	G-06	1	.	.	.	.
	G-07	.	.	.	1	.
	G-09	.	.	.	.	1
	G-12	1	.	.	.	.
	G-14	1	1	1	1	1
	G-15	.	.	.	1	2
*TOTAL ADMIXOFC TULSA		4	2	1	3	5
TUSCON	G-09	1	1	1	1	1
	G-13	.	.	.	.	1
	G-15	.	.	.	1	1
*TOTAL ADMIXOFC TUSCON		1	1	1	2	3
WASH DC	G-04	1	1	1	.	.
	G-06	1	.	.	.	.
	G-07	1	.	1	2	2
	G-09	.	.	.	1	1
	G-12	.	.	.	2	2
	G-13	2	2	2	2	3
	G-14	.	.	.	1	3
	G-15	2	2	2	3	7
*TOTAL ADMIXOFC WASH DC		7	5	6	11	18
WILMNGTN	G-01	.	.	.	.	1
	G-07	.	.	.	.	1
	G-15	.	.	.	1	2
*TOTAL ADMIXOFC WILMNGTN		0	0	0	1	4
*TOTAL DPMTL_MLG *DM*		448	450	478	923	1096

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
I/O A/S	G-01	.	2	5	.	1
	G-02	.	7	3	.	.
	G-03	.	11	5	.	1
	G-04	.	9	5	.	.
	G-05	1	.	2	.	.
	G-07	.	.	1	.	.
	G-09	1	.	.	5	2
	G-10	.	2	2	1	2
	G-11	1	.	.	.	3
	G-12	1	2	.	1	6
	G-13	.	.	1	.	5
	G-14	2	2	2	1	2
	G-15	2	1	1	1	5
	*SRES	2	3	3	3	3
	*SREX	1	1	1	.	.
*TOTAL ADMIXOFC	I/O A/S	11	40	31	12	30
BUDGET	G-04	.	1	.	.	.
	G-06	2	2	.	.	.
	G-07	2	1	.	.	.
	G-08	3	1	.	.	.
	G-09	3	4	.	.	.
	G-11	1	1	.	.	.
	G-12	2	2	.	.	.
	G-13	11	7	1	.	.
	G-14	6	9	.	.	.
	G-15	8	8	.	.	.
	*SRES	2	.	.	.	.
*TOTAL ADMIXOFC	BUDGET	40	36	1	0	0
DAS OPS	G-04	.	.	.	.	1
	G-05	.	.	.	.	1
	G-06	.	.	.	.	1
	G-07	.	.	.	.	7

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
DAS OPS	G-08	.	.	.	.	1
	G-12	.	.	.	.	2
	G-13	.	.	.	.	6
	*SRES	.	.	.	.	1
*TOTAL ADMIXOFC	DAS OPS	0	0	0	0	20
EX SCHED	G-04	1	.	.	.	.
	G-06	1	.	.	.	.
	G-07	.	.	.	.	1
	G-08	.	.	.	.	1
	G-09	1	1	3	2	1
	G-10	.	.	1	2	.
	G-11	3	1	2	1	2
	G-12	2	3	4	2	2
	G-13	4	1	2	1	2
	G-14	.	1	1	1	3
	G-15	.	.	.	1	3
*TOTAL ADMIXOFC	EX SCHED	12	7	13	10	15
EX SEC	G-01	.	.	.	1	.
	G-03	1	.	.	.	1
	G-04	.	1	1	.	.
	G-05	1	1	1	1	.
	G-06	.	2	1	2	2
	G-07	1	.	.	.	1
	G-08	.	1	1	2	1
	G-09	4	3	3	3	2
	G-10	.	.	.	.	1
	G-11	5	5	5	4	5
	G-12	5	4	6	4	4
	G-13	1	3	3	3	4
	G-14	4	2	2	3	2
	G-15	1	1	.	1	.
*TOTAL ADMIXOFC	EX SEC	23	23	23	24	23

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
OAMS	G-02	.	.	.	2	.
	G-04	3	2	2	2	.
	G-05	7	6	6	6	.
	G-06	3	3	2	3	.
	G-07	7	7	7	3	.
	G-08	3	3	3	1	.
	G-09	6	4	2	6	.
	G-10	1	1	.	.	.
	G-11	13	13	9	6	.
	G-12	29	24	27	28	.
	G-13	12	20	19	23	.
	G-14	10	10	7	7	1
	G-15	6	7	7	5	1
	*BLUE	15	14	12	8	1
	*SRES	1	1	1	1	.
*TOTAL ADMIXOFC	OAMS	116	115	104	101	3
OHR	G-03	.	.	.	3	.
	G-04	.	1	.	.	.
	G-05	7	11	6	3	.
	G-06	4	12	11	6	.
	G-07	12	15	18	23	.
	G-08	11	10	5	6	.
	G-09	4	3	7	7	.
	G-10	3	2	1	1	.
	G-11	6	11	5	3	.
	G-12	9	14	17	14	.
	G-13	33	29	30	24	.
	G-14	18	17	18	18	.
	G-15	6	8	7	6	2
	*SRES	2	1	1	.	.
*TOTAL ADMIXOFC	OHR	115	134	126	114	2
OMAP	G-05	.	.	.	.	1

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
OMAP	G-07	2	2	1	.	.
	G-08	.	.	1	.	.
	G-09	1	1	1	1	3
	G-11	.	.	.	1	2
	G-12	.	.	.	.	1
	G-13	2	1	1	.	.
	G-14	3	3	3	2	2
	G-15	4	4	4	2	7
*TOTAL ADMIXOFC	OMAP	12	11	11	6	16
OPC	G-05	1	2	1	1	.
	G-06	1	1	.	.	.
	G-07	5	5	7	4	.
	G-08	.	.	.	1	.
	G-09	3	2	3	2	.
	G-11	2	3	2	4	.
	G-12	3	2	4	2	.
	G-13	12	14	12	12	.
	G-14	5	5	6	5	.
	G-15	4	3	3	3	.
	*SRES	1	1	1	1	.
*TOTAL ADMIXOFC	OPC	37	38	39	35	0
SPEC ACT	G-07	.	.	.	.	1
	G-08	1	.	.	.	.
	G-09	.	.	1	3	3
	G-11	1	1	1	2	2
	G-13	2	1	.	.	.
	G-14	1	2	2	2	7
	G-15	3	2	1	2	10
	*SRES	.	.	1	1	1
*TOTAL ADMIXOFC	SPEC ACT	8	6	6	10	24

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
TECH SVC	G-01	.	.	.	.	1
	G-02	.	.	.	.	1
	G-03	.	.	.	.	4
	G-04	.	.	.	.	6
	G-05	.	.	.	.	8
	G-06	.	.	.	.	3
	G-07	.	.	.	.	23
	G-08	.	.	.	.	4
	G-09	.	.	.	.	12
	G-10	.	.	.	.	2
	G-11	.	.	.	.	9
	G-12	.	.	.	.	36
	G-13	.	.	.	.	55
	G-14	.	.	.	.	26
	G-15	.	.	.	.	12
	*BLUE	.	.	.	.	8
	*SRES	.	.	.	.	1
*TOTAL ADMIXOFC	TECH SVC	0	0	0	0	211
TRAINING	G-02	.	.	.	3	.
	G-05	1	1	1	1	.
	G-06	1	4	.	.	.
	G-07	2	3	3	3	.
	G-08	.	2	1	.	.
	G-09	3	1	3	6	.
	G-10	1	1	1	1	.
	G-11	.	1	2	2	.
	G-12	9	9	3	3	.
	G-13	8	12	15	12	.
	G-14	5	5	4	4	1
	G-15	1	2	4	2	.
	*SRES	1	1	1	.	.
*TOTAL ADMIXOFC	TRAINING	32	42	38	37	1

REPORT: FYPASSN2 P.P. END: 09/27/1997 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
ALBANY	G-11	.	.	1	.	.
	G-12	.	.	.	1	1
*TOTAL ADMIXOFC ALBANY		0	0	1	1	1
ALBQRQUE	G-06	1	.	.	.	.
	G-07	.	1	.	.	.
	G-09	.	.	1	.	.
	G-12	.	1	1	.	1
*TOTAL ADMIXOFC ALBQRQUE		1	2	2	0	1
ANCHRAGE	G-05	1	.	.	.	.
	G-06	.	1	.	.	.
	G-07	.	.	.	1	1
	G-11	1	.	.	.	.
	G-12	.	1	1	1	.
	G-13	.	.	.	.	1
*TOTAL ADMIXOFC ANCHRAGE		2	2	1	2	2
ATLANTA	G-03	.	.	.	1	.
	G-04	.	.	.	.	1
	G-05	3	.	1	1	2
	G-06	2	3	1	.	.
	G-07	13	10	17	6	4
	G-08	2	.	.	.	.
	G-09	1	.	1	9	.
	G-11	5	1	.	1	2
	G-12	19	16	14	11	9
	G-13	3	4	8	8	5
	G-14	5	6	5	4	.
	G-15	1	2	2	2	2
*TOTAL ADMIXOFC ATLANTA		54	42	49	43	25

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
BALTIMOR	G-06	2	.	.	.	.
	G-07	.	2	2	2	1
	G-11	1	.	1	1	1
	G-12	2	3	3	3	1
	G-13	.	.	.	.	1
*TOTAL ADMIXOFC BALTIMOR		5	5	6	6	4
BOSTON	G-02	.	.	.	1	.
	G-03	.	.	.	.	1
	G-04	1	1	1	1	1
	G-05	1	.	.	.	.
	G-06	1	1	1	1	1
	G-07	3	3	2	.	.
	G-09	3	.	.	2	.
	G-11	2	2	2	2	2
	G-12	6	7	6	6	4
	G-13	2	1	1	1	1
	G-14	3	1	.	.	.
	G-15	1	.	.	.	.
*TOTAL ADMIXOFC BOSTON		23	16	13	14	10
BRMNGHAM	G-07	3	2	1	1	1
	G-09	.	1	.	.	.
	G-11	.	.	1	1	.
	G-12	2	1	1	1	1
*TOTAL ADMIXOFC BRMNGHAM		5	4	3	3	2
BUFFALO	G-04	1	.	.	.	.
	G-05	1	1	1	1	.
	G-06	.	1	1	1	1
	G-07	1	.	.	.	1

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
BUFFALO	G-08	1	1	.	.	.
	G-09	.	.	1	.	.
	G-11	1	.	.	.	.
	G-12	2	1	1	.	.
	G-13	1	1	1	1	1
*TOTAL ADMIXOFC BUFFALO		8	5	5	3	3
CHARLSTN	G-07	1	.	1	.	.
	G-09	.	.	.	1	1
	G-11	1	.	.	.	.
	G-15	1	.	.	.	.
*TOTAL ADMIXOFC CHARLSTN		3	0	1	1	1
CHICAGO	G-01	1	1	1	1	1
	G-03	2	.	.	.	.
	G-04	4	1	1	1	1
	G-05	5	4	1	.	.
	G-06	5	.	4	1	.
	G-07	2	3	3	6	4
	G-09	5	1	2	1	.
	G-11	18	2	2	4	3
	G-12	15	14	16	11	4
	G-13	3	4	4	5	3
	G-14	2	2	2	1	1
	G-15	2	.	.	.	.
*TOTAL ADMIXOFC CHICAGO		64	32	36	31	17
CLEVELND	G-05	2	.	.	.	.
	G-06	.	1	.	.	.
	G-07	1	.	1	1	1
	G-09	1	1	.	.	.

REPORT: FYPASSN2 P.P. END: 09/27/1997 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
CLEVELND	G-11	1	1	2	2	1
	G-12	2	1	1	1	1
*TOTAL ADMIXOFC CLEVELND		7	4	4	4	3
CNCINATI	G-09	1	.	.	.	.
	G-11	.	1	.	.	.
	G-12	2	1	1	1	1
*TOTAL ADMIXOFC CNCINATI		3	2	1	1	1
COLUMBIA	G-01	.	.	.	1	.
	G-03	.	.	.	.	1
	G-05	1	.	.	.	.
	G-06	.	1	.	.	.
	G-07	1	.	1	.	.
	G-12	2	1	1	1	1
*TOTAL ADMIXOFC COLUMBIA		4	2	2	2	2
COLUMBUS	G-06	1	.	.	.	.
	G-07	.	1	1	1	.
	G-09	1	.	1	.	.
	G-11	.	.	.	1	1
	G-12	1	1	1	1	.
*TOTAL ADMIXOFC COLUMBUS		3	2	3	3	1
CORAL GB	G-07	1	.	.	1	.
	G-09	.	1	.	.	.
	G-11	1	.	1	.	.
	G-12	.	.	.	1	1

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADM

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
*TOTAL ADMIXOFC CORAL GB		2	1	1	2	1
DALLAS	G-07	.	1	.	.	.
	G-09	.	.	1	1	1
*TOTAL ADMIXOFC DALLAS		0	1	1	1	1
DENVER	G-03	.	.	.	2	.
	G-04	3	.	.	.	1
	G-05	2	4	2	.	.
	G-06	3	1	2	2	2
	G-07	4	5	8	10	1
	G-08	2	1	1	1	.
	G-09	3	4	2	2	3
	G-11	10	1	3	3	.
	G-12	13	12	13	10	6
	G-13	4	6	8	7	3
	G-14	6	7	6	7	4
	G-15	2	2	2	2	2
*TOTAL ADMIXOFC DENVER		52	43	47	46	22
DES MOIN	G-05	1	.	.	.	.
	G-06	.	1	.	.	.
	G-07	.	.	1	1	1
	G-11	2	.	.	.	.
	G-12	.	1	1	1	.
*TOTAL ADMIXOFC DES MOIN		3	2	2	2	1
DETROIT	G-05	1	.	.	.	.
	G-06	1	1	.	.	.

REPORT: FYPASSN2 P.P. END: 09/27/1997 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
DETROIT	G-07	1	1	2	1	1
	G-11	1	1	1	1	1
	G-12	2	1	1	1	1
*TOTAL ADMIXOFC DETROIT		6	4	4	3	3
FRESNO	G-11	1	1	.	.	.
FT WORTH	G-04	2	.	.	.	.
	G-05	9	1	.	.	.
	G-06	4	6	5	2	1
	G-07	8	4	8	4	3
	G-08	.	.	1	.	.
	G-09	4	2	2	5	.
	G-11	10	3	2	3	2
	G-12	13	11	10	9	5
	G-13	2	3	3	3	3
	G-14	1	3	3	3	2
	G-15	1	.	.	.	.
*TOTAL ADMIXOFC FT WORTH		54	33	34	29	16
GREENSBR	G-04	1	.	.	.	.
	G-05	.	1	.	.	.
	G-06	.	.	1	1	1
	G-07	3	2	2	1	1
	G-09	.	1	.	.	.
	G-11	.	.	1	1	.
	G-12	2	1	1	1	1
*TOTAL ADMIXOFC GREENSBR		6	5	5	4	3
GRND RPD	G-05	1	.	.	.	.

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
GRND RPD	G-06	.	1	.	.	.
	G-07	.	.	1	1	1
	G-11	2	1	1	1	1
	G-12	2	1	.	.	.
*TOTAL ADMIXOFC GRND RPD		5	3	2	2	2
HARTFORD	G-04	1	.	.	.	.
	G-05	.	1	1	1	1
	G-09	1	.	.	.	.
	G-11	.	1	1	1	.
	G-12	2	1	1	1	1
*TOTAL ADMIXOFC HARTFORD		4	3	3	3	2
HONOLULU	G-07	1	.	.	.	1
	G-09	.	1	.	.	.
	G-12	1	.	.	.	.
*TOTAL ADMIXOFC HONOLULU		2	1	0	0	1
HOUSTON	G-04	3	.	.	.	.
	G-05	.	2	2	1	1
	G-06	.	.	.	1	1
	G-07	1	.	1	.	.
	G-09	.	2	.	1	.
	G-11	1	.	2	.	1
	G-12	.	3	2	4	1
*TOTAL ADMIXOFC HOUSTON		5	7	7	7	4
INDNAPLS	G-04	1	.	.	.	.

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
INDNAPLS	G-05	2	1	.	.	.
	G-06	.	2	.	.	.
	G-07	.	.	2	2	1
	G-09	1	.	.	.	.
	G-11	1	2	.	.	.
	G-12	1	.	1	1	1
*TOTAL ADMIXOFC INDNAPLS		6	5	3	3	2
JACKSNVL	G-07	3	2	2	2	2
	G-09	.	1	1	.	.
	G-11	.	.	1	1	1
	G-12	2	.	.	.	.
	G-13	.	.	.	1	1
*TOTAL ADMIXOFC JACKSNVL		5	3	4	4	4
JACKSON	G-06	1	.	.	.	.
	G-07	1	2	1	1	1
	G-09	.	.	1	.	.
	G-11	.	.	.	1	.
	G-12	1	.	.	.	1
*TOTAL ADMIXOFC JACKSON		3	2	2	2	2
KAN CITY	G-03	.	.	.	1	.
	G-04	1	1	.	.	1
	G-05	.	.	2	.	.
	G-06	5	1	.	1	.
	G-07	3	5	4	3	3
	G-08	1	1	.	.	.
	G-09	.	.	.	2	1
	G-11	4	1	.	.	1
	G-12	14	10	6	3	3

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
KAN CITY	G-13	2	2	2	2	1
	G-14	2	3	2	2	1
	G-15	1	.	.	.	.
*TOTAL ADMIXOFC KAN CITY		33	24	16	14	11
KNOXVLLE	G-02	.	.	.	1	.
	G-04	.	.	.	.	1
	G-07	1	1	1	.	.
	G-12	1	1	1	1	1
*TOTAL ADMIXOFC KNOXVLLE		2	2	2	2	2
L. A.	G-05	1	1	1	1	1
	G-07	1	1	1	1	1
	G-09	.	1	1	.	.
	G-11	1	.	1	1	.
	G-12	1	1	1	2	2
	G-13	.	.	.	.	1
*TOTAL ADMIXOFC L. A.		4	4	5	5	5
LAS VGAS	G-07	.	.	1	.	.
	G-09	.	.	.	1	.
	G-11	1	.	.	.	.
*TOTAL ADMIXOFC LAS VGAS		1	0	1	1	0
LOUISVL	G-07	2	1	1	1	1
	G-12	2	1	1	1	1
*TOTAL ADMIXOFC LOUISVL		4	2	2	2	2

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
LTL ROCK	G-05	1	.	.	.	.
	G-06	1	1	.	.	.
	G-07	.	1	2	2	2
	G-11	1	.	.	.	.
	G-12	1	1	1	1	1
*TOTAL ADMIXOFC LTL ROCK		4	3	3	3	3
LUBBOCK	G-07	.	1	.	.	.
	G-09	.	.	1	1	1
*TOTAL ADMIXOFC LUBBOCK		0	1	1	1	1
MANCHSTR	G-09	1	.	.	.	.
	G-11	.	1	1	1	1
	G-12	1	.	.	.	.
*TOTAL ADMIXOFC MANCHSTR		2	1	1	1	1
MEMPHIS	G-07	1	.	.	.	.
	G-09	.	1	1	1	1
	G-11	1	.	.	.	.
*TOTAL ADMIXOFC MEMPHIS		2	1	1	1	1
MIN-STPL	G-05	1	.	.	.	.
	G-06	1	.	.	.	.
	G-07	.	1	1	1	1
	G-09	.	.	1	.	.
	G-11	2	.	.	.	.
	G-12	2	1	1	1	1
*TOTAL ADMIXOFC MIN-STPL		6	2	3	2	2

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
MLWAUKEE	G-06	1	.	.	.	.
	G-07	.	1	1	1	1
	G-09	1	.	.	.	.
	G-11	2	2	1	1	1
	G-12	2	1	1	1	1
*TOTAL ADMIXOFC MLWAUKEE		6	4	3	3	3
NASHVLLE	G-05	1	.	.	.	.
	G-06	.	1	.	.	.
	G-07	1	1	2	2	1
	G-12	2	1	1	1	1
*TOTAL ADMIXOFC NASHVLLE		4	3	3	3	2
NEW ORLN	G-05	2	.	.	.	.
	G-06	.	2	.	.	.
	G-07	.	.	2	1	1
	G-09	.	.	.	1	.
	G-11	1	.	.	.	1
	G-12	1	1	1	1	1
*TOTAL ADMIXOFC NEW ORLN		4	3	3	3	3
NEW YORK	G-01	.	.	.	1	.
	G-03	.	.	.	.	2
	G-05	2	.	2	.	.
	G-06	5	3	2	1	1
	G-07	1	3	2	4	1
	G-08	1	.	.	.	.
	G-09	1	.	1	.	1
	G-11	3	2	2	2	2
	G-12	14	7	13	10	7
	G-13	7	6	8	8	7

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
NEW YORK	G-14	2	4	5	5	2
	G-15	2	1	1	1	.
*TOTAL ADMIXOFC NEW YORK		38	26	36	32	23
NEWARK	G-05	2	.	.	.	.
	G-06	.	1	.	.	.
	G-07	3	.	1	1	1
	G-09	.	1	.	.	.
	G-11	.	.	1	.	.
	G-12	2	1	.	.	.
	G-13	1	1	1	1	1
*TOTAL ADMIXOFC NEWARK		8	4	3	2	2
OKLA CTY	G-05	1	2	1	.	.
	G-06	.	.	1	.	.
	G-07	.	1	.	1	1
	G-09	.	.	1	.	.
	G-11	.	.	.	1	.
	G-12	1	4	2	1	1
*TOTAL ADMIXOFC OKLA CTY		2	7	5	3	2
OMAHA	G-06	1	.	.	.	.
	G-07	1	1	1	1	1
	G-09	.	1	.	.	.
	G-11	1	.	1	.	.
	G-12	.	.	.	1	1
*TOTAL ADMIXOFC OMAHA		3	2	2	2	2

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
ORLANDO	G-11	1	.	.	.	.
PHILA	G-04	1	.	.	.	.
	G-05	4	1	.	.	.
	G-06	5	3	2	.	.
	G-07	.	3	3	4	2
	G-08	1	.	.	.	.
	G-09	.	.	1	.	.
	G-11	4	.	.	1	1
	G-12	18	11	10	7	4
	G-13	4	5	4	4	2
	G-14	2	3	2	2	1
	G-15	1	.	.	.	.
*TOTAL ADMIXOFC PHILA		40	26	22	18	10
PHOENIX	G-05	1	.	.	.	.
	G-06	1	1	.	.	.
	G-07	1	1	2	2	2
	G-09	1	1	1	.	.
	G-11	.	.	.	1	.
	G-12	1	2	2	2	1
*TOTAL ADMIXOFC PHOENIX		5	5	5	5	3
PITTSBRG	G-07	.	.	1	1	1
	G-09	1	.	.	.	.
	G-11	.	1	1	1	1
	G-12	1	1	1	1	1
*TOTAL ADMIXOFC PITTSBRG		2	2	3	3	3
PORTLAND	G-06	1	.	.	.	.

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PORTLAND	G-07	.	1	1	1	1
	G-12	2	1	1	1	.
	G-13	.	.	.	.	1
*TOTAL ADMIXOFC PORTLAND		3	2	2	2	2
PROVIDNC	G-09	1	1	.	.	.
	G-11	.	1	.	.	.
	G-12	1	.	.	.	.
	G-15	1	.	.	.	.
*TOTAL ADMIXOFC PROVIDNC		3	2	0	0	0
PRT RICO	G-06	2	.	.	.	.
	G-07	1	2	2	2	1
	G-09	.	1	.	.	.
	G-11	.	.	1	.	.
	G-12	2	.	.	1	1
*TOTAL ADMIXOFC PRT RICO		5	3	3	3	2
RICHMOND	G-05	1	.	.	.	.
	G-06	1	1	.	.	.
	G-07	.	1	1	1	1
	G-09	1	.	.	.	.
	G-11	.	1	1	.	.
	G-12	2	1	1	1	.
*TOTAL ADMIXOFC RICHMOND		5	4	3	2	1
SACRMNTO	G-07	1	1	1	.	.
	G-11	1	.	.	.	.

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
SACRMNTO	G-12	.	1	1	1	.
	G-13	.	.	.	.	1
*TOTAL ADMIXOFC SACRMNTO		2	2	2	1	1
SAN DIEG	G-11	1	.	1	.	.
	G-12	1	1	.	1	1
*TOTAL ADMIXOFC SAN DIEG		2	1	1	1	1
SAN FRAN	G-05	2	1	.	.	.
	G-06	2	.	.	.	.
	G-07	5	3	3	3	2
	G-08	2	1	1	1	.
	G-09	2	2	3	2	3
	G-11	5	3	.	1	.
	G-12	15	8	10	8	4
	G-13	7	3	2	3	4
	G-14	.	1	1	1	1
	G-15	1	.	.	.	.
	*BLUE	1	1	1	1	1
*TOTAL ADMIXOFC SAN FRAN		42	23	21	20	15
SEATTLE	G-03	1	1	.	.	.
	G-04	1	1	1	1	1
	G-05	3	1	1	1	1
	G-06	1	1	.	.	.
	G-07	4	3	2	1	.
	G-09	2	1	1	.	.
	G-11	4	2	2	1	1
	G-12	4	4	4	6	4
	G-13	3	2	2	2	1
	G-14	1	.	.	.	.

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SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
*TOTAL ADMIXOFC SEATTLE		24	16	13	12	8
SHRVPORT	G-07	.	1	.	.	.
	G-09	.	.	1	1	1
*TOTAL ADMIXOFC SHRVPORT		0	1	1	1	1
SLT LAKE	G-12	.	2	2	2	.
SN ANTON	G-04	2	.	.	.	.
	G-05	.	2	.	.	.
	G-06	.	.	2	2	1
	G-07	.	.	1	.	.
	G-09	.	.	.	1	.
	G-11	1	.	.	.	1
	G-12	1	1	1	.	.
	G-13	.	.	.	1	1
*TOTAL ADMIXOFC SN ANTON		4	3	4	4	3
SNTA ANA	G-05	.	.	1	.	.
	G-07	.	.	.	1	.
	G-09	.	.	.	.	1
	G-11	1	1	1	1	1
	G-13	.	.	.	1	1
*TOTAL ADMIXOFC SNTA ANA		1	1	2	3	3
ST LOUIS	G-04	1	.	.	.	.
	G-05	.	1	.	.	.
	G-06	1	.	1	.	.

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN ADMI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
ST LOUIS	G-07	.	1	.	1	1
	G-09	.	.	1	.	.
	G-11	1	.	.	1	.
	G-12	1	1	1	.	1
	G-13	.	.	.	.	1
*TOTAL ADMIXOFC ST LOUIS		4	3	3	2	3
TAMPA	G-07	1	.	.	.	.
	G-09	.	1	.	.	.
	G-11	1	.	.	.	.
	G-13	.	.	1	.	.
*TOTAL ADMIXOFC TAMPA		2	1	1	0	0
TULSA	G-07	.	1	.	.	.
	G-09	.	.	1	1	1
*TOTAL ADMIXOFC TULSA		0	1	1	1	1
WASH DC	G-05	1	.	.	.	.
	G-06	.	1	.	.	.
	G-07	3	3	.	.	.
	G-09	.	.	1	.	.
	G-11	.	.	.	1	1
	G-12	1	.	1	.	.
*TOTAL ADMIXOFC WASH DC		5	4	2	1	1
*TOTAL DPMTL_MLG ADMIN		1015	875	815	732	605

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CFO

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
CFO	G-01	.	.	.	3	14
	G-02	.	4	.	4	9
	G-03	6	.	.	6	11
	G-04	4	.	4	16	25
	G-05	4	3	2	2	3
	G-06	4	4	6	4	3
	G-07	20	23	23	9	5
	G-08	4	4	4	3	4
	G-09	5	2	5	8	6
	G-10	1	1	1	2	2
	G-11	30	27	24	5	7
	G-12	51	47	41	16	13
	G-13	48	54	54	52	52
	G-14	29	25	31	31	34
	G-15	15	16	19	26	23
	*SRES	5	3	4	4	4
	*SREX	.	1	.	1	.
*TOTAL ADMIXOFC	CFO	226	214	218	192	215
ATLANTA	G-05	1	1	1	.	.
	G-06	5	5	2	1	.
	G-07	12	12	14	2	.
	G-11	.	.	2	.	.
	G-12	8	8	7	.	.
	G-13	3	2	3	.	.
	G-14	1	1	2	.	.
	G-15	1	1	.	.	.
*TOTAL ADMIXOFC ATLANTA		31	30	31	3	0
BOSTON	G-06	5	4	4	.	.
	G-12	7	4	3	.	.
	G-13	2	1	1	.	.
*TOTAL ADMIXOFC BOSTON		14	9	8	0	0

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CFO

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
CHICAGO	G-04	1	1	.	.	.
	G-05	.	2	3	.	.
	G-06	8	5	.	.	.
	G-07	.	1	4	.	.
	G-09	1	.	.	.	.
	G-11	6	6	4	.	.
	G-12	7	7	6	.	.
	G-13	4	4	3	.	.
	G-14	1	1	1	.	.
	G-15	1	1	1	1	.
*TOTAL ADMIXOFC CHICAGO		29	28	22	1	0
DENVER	G-05	.	.	2	.	.
	G-06	1	1	.	.	.
	G-07	6	6	9	.	.
	G-11	.	.	1	.	.
	G-12	4	3	1	.	.
	G-13	.	.	3	.	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC DENVER		12	11	17	0	0
FT WORTH	G-01	.	.	.	1	2
	G-03	.	.	.	3	1
	G-04	.	.	.	1	5
	G-05	1	2	3	2	1
	G-06	7	7	1	6	2
	G-07	6	6	10	20	18
	G-09	.	.	.	2	3
	G-11	1	.	.	4	4
	G-12	4	4	2	20	19
	G-13	.	.	4	6	6
	G-14	1	1	.	2	2
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC FT WORTH		21	21	21	68	64

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CFO

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
KAN CITY	G-06	1	.	.	.	.
	G-07	3	1	.	.	.
	G-09	1	.	.	.	.
	G-11	1	1	.	.	.
	G-12	4	4	.	.	.
	G-13	1	1	1	.	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC KAN CITY		12	8	2	0	0
NEW YORK	G-06	6	6	1	.	.
	G-07	.	.	3	1	.
	G-09	1	.	.	.	.
	G-11	3	3	1	.	.
	G-12	8	9	4	.	.
	G-13	1	1	1	.	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC NEW YORK		20	20	11	1	0
PHILA	G-05	1	1	.	.	.
	G-06	3	3	1	.	.
	G-07	1	1	.	.	.
	G-08	1	1	.	.	.
	G-09	1	.	1	.	.
	G-11	1	1	.	.	.
	G-12	2	2	2	.	.
	G-13	3	2	2	1	.
	G-14	1	1	.	.	.
*TOTAL ADMIXOFC PHILA		14	12	6	1	0
SAN FRAN	G-05	2	1	1	.	.
	G-06	2	2	1	.	.

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CFO

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
SAN FRAN	G-07	3	2	1	.	.
	G-09	.	1	.	.	.
	G-11	2	2	1	.	.
	G-12	7	7	7	.	.
	G-13	1	1	1	.	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC SAN FRAN		18	17	13	0	0
SEATTLE	G-06	3	3	2	.	.
	G-08	1	1	.	.	.
	G-11	1	1	1	.	.
	G-12	3	3	2	.	.
	G-13	1	1	1	.	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC SEATTLE		10	10	7	0	0
*TOTAL DPMTL_MLG CFO		407	380	356	266	279

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CIO

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
CIO	G-07	.	.	.	.	1
	G-10	.	.	.	.	1
	G-14	.	.	.	.	1
	G-15	.	.	.	.	2
	*SRES	.	.	.	.	1
*TOTAL ADMIXOFC CIO		0	0	0	0	6
*TOTAL DPMTL_MLG CIO		0	0	0	0	6

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
CPD	G-02	.	.	.	2	.
	G-03	1	1	2	5	.
	G-04	2	1	5	3	5
	G-05	2	3	1	1	1
	G-06	10	5	5	8	6
	G-07	25	22	19	17	17
	G-08	2	12	11	8	7
	G-09	17	15	13	20	18
	G-10	3	5	1	3	2
	G-11	3	6	11	9	15
	G-12	9	8	7	17	14
	G-13	74	61	55	40	47
	G-14	45	44	39	51	57
	G-15	44	43	34	29	50
	*SRES	10	8	6	8	4
	*SREX	1	1	.	1	1
*TOTAL ADMIXOFC CPD		248	235	209	222	244
ALBQRQUE	G-05	.	.	1	1	.
	G-06	.	.	.	1	.
	G-07	.	.	.	.	1
	G-12	.	.	1	1	1
	G-13	.	.	1	1	1
	G-14	.	1	1	1	1
*TOTAL ADMIXOFC ALBQRQUE		0	1	4	5	4
ANCHRAGE	G-06	1	1	.	.	.
	G-07	.	.	1	1	1
	G-11	.	.	.	1	.
	G-12	3	3	2	1	2
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC ANCHRAGE		5	5	4	4	4

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
ATLANTA	G-03	.	.	.	1	.
	G-04	.	.	.	.	1
	G-05	.	.	.	1	.
	G-06	1	1	.	.	.
	G-07	1	1	2	3	2
	G-11	1	.	.	.	.
	G-12	13	14	11	8	9
	G-13	10	6	8	6	7
	G-14	3	3	2	1	.
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC ATLANTA		30	26	24	21	20
BALTIMOR	G-06	1	.	.	.	.
	G-07	.	1	1	1	1
	G-12	4	5	5	5	3
	G-13	2	2	2	1	3
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC BALTIMOR		8	9	9	8	8
BOSTON	G-07	3	3	1	.	.
	G-09	.	.	3	4	2
	G-11	.	.	.	.	1
	G-12	17	17	16	12	12
	G-13	5	5	5	4	4
	G-14	2	1	1	1	1
	G-15	.	1	1	1	1
*TOTAL ADMIXOFC BOSTON		27	27	27	22	21
BRMNGHAM	G-06	1	1	1	1	1
	G-07	1	1	1	1	1
	G-12	6	6	6	6	6

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
BRMNGHAM	G-13	1	1	1	1	1
	G-14	1	1	1	.	1
	G-15	.	.	1	1	1
*TOTAL ADMIXOFC BRMNGHAM		10	10	11	10	11
BUFFALO	G-05	3	3	2	.	.
	G-06	1	1	2	3	3
	G-07	1	1	1	4	4
	G-09	.	.	.	1	.
	G-11	.	.	.	1	2
	G-12	17	17	15	19	18
	G-13	4	4	4	4	3
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC BUFFALO		27	27	25	33	31
CHICAGO	G-05	4	2	1	2	1
	G-06	.	1	1	.	.
	G-07	2	2	2	6	6
	G-11	1	1	.	.	.
	G-12	17	17	17	17	14
	G-13	2	2	3	3	4
	G-14	2	2	2	2	2
	G-15	2	2	2	1	.
*TOTAL ADMIXOFC CHICAGO		30	29	28	31	27
COLUMBIA	G-06	.	.	1	1	1
	G-07	1	1	1	2	2
	G-12	3	4	6	6	6
	G-13	1	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC COLUMBIA		6	7	10	11	11

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
COLUMBUS	G-01	.	.	.	1	.
	G-05	2	2	.	1	.
	G-06	3	.	1	2	1
	G-07	2	3	2	2	2
	G-09	.	2	1	.	.
	G-11	.	.	2	1	.
	G-12	14	12	11	13	13
	G-13	4	4	4	4	4
	G-15	1	1	.	1	1
*TOTAL ADMIXOFC COLUMBUS		26	24	21	25	21
CORAL GB	G-05	.	.	.	1	1
	G-06	.	.	1	1	1
	G-07	.	.	.	1	.
	G-09	.	.	.	2	.
	G-11	.	.	.	.	2
	G-12	.	.	4	5	5
	G-13	.	.	3	3	1
	G-14	.	.	.	.	1
*TOTAL ADMIXOFC CORAL GB		0	0	8	13	11
DENVER	G-01	.	.	.	.	1
	G-02	.	.	.	2	.
	G-03	.	.	.	.	1
	G-04	1	.	.	.	.
	G-05	3	2	1	.	.
	G-06	1	2	.	.	.
	G-07	.	.	2	2	2
	G-09	.	.	.	1	.
	G-12	13	13	11	7	9
	G-13	3	4	4	3	4
	G-14	2	1	1	1	1
	G-15	.	1	1	1	1
*TOTAL ADMIXOFC DENVER		23	23	20	17	19

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
DETROIT	G-04	1	.	.	.	.
	G-05	2	3	2	1	1
	G-06	1	.	.	1	1
	G-07	.	1	1	1	1
	G-12	13	13	12	11	11
	G-13	3	3	4	5	5
	G-14	.	.	.	1	.
	G-15	1	1	1	.	.
*TOTAL ADMIXOFC DETROIT		21	21	20	20	19
FLA. ST.	G-14	.	.	1	.	.
FT WORTH	G-02	.	.	.	1	.
	G-03	.	.	.	.	1
	G-04	1	1	1	.	.
	G-05	2	1	.	1	1
	G-06	.	.	1	1	1
	G-07	2	3	2	2	4
	G-09	.	.	.	1	.
	G-11	.	.	.	.	2
	G-12	14	12	11	10	12
	G-13	6	6	5	6	5
	G-14	2	2	2	1	1
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC FT WORTH		28	26	23	24	28
GREENSBR	G-05	.	.	.	1	.
	G-06	1	1	.	.	.
	G-07	.	.	1	1	1
	G-09	.	.	1	1	1
	G-12	6	7	7	5	6
	G-13	1	1	2	3	3
	G-14	1	1	1	1	1

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
*TOTAL ADMIXOFC GREENSBR		9	10	12	12	12
HARTFORD	G-05	1	1	.	.	.
	G-06	.	.	1	.	.
	G-07	.	.	.	1	2
	G-11	.	1	1	2	2
	G-12	5	6	6	4	4
	G-13	1	.	.	.	.
	G-14	.	1	1	2	2
*TOTAL ADMIXOFC HARTFORD		7	9	9	9	10
HONOLULU	G-07	1	1	2	2	2
	G-12	1	1	2	2	2
	G-14	1	1	1	.	1
*TOTAL ADMIXOFC HONOLULU		3	3	5	4	5
INDNAPLS	G-05	1	.	.	.	.
	G-06	1	1	1	1	.
	G-07	.	1	1	1	3
	G-12	5	5	5	2	3
	G-13	2	2	2	3	3
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC INDNAPLS		10	10	10	8	10
JACKSNVL	G-05	1	.	.	.	.
	G-06	2	3	.	.	.
	G-07	.	.	3	3	2
	G-12	17	17	17	16	16
	G-13	4	5	3	3	3

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
JACKSNVL	G-14	1	1	1	1	1
*TOTAL ADMIXOFC JACKSNVL		25	26	24	23	22
JACKSON	G-01	.	.	.	.	1
	G-03	.	.	.	1	.
	G-06	2	1	.	.	.
	G-07	.	1	1	1	1
	G-12	2	2	2	4	4
	G-13	.	.	.	1	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC JACKSON		5	5	4	7	6
KAN CITY	G-05	.	.	.	1	.
	G-06	1	.	.	.	.
	G-07	1	1	1	.	.
	G-08	.	.	.	1	1
	G-12	7	7	7	6	5
	G-13	2	2	2	2	1
	G-14	2	2	2	2	2
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC KAN CITY		14	13	13	13	10
KNOXVLLE	G-03	.	.	.	1	.
	G-04	.	.	.	.	1
	G-05	.	.	1	.	.
	G-07	1	1	.	2	1
	G-09	.	.	1	.	.
	G-11	.	.	.	2	1
	G-12	6	6	4	6	7
	G-13	.	.	.	1	1
	G-14	1	1	1	1	1

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
*TOTAL ADMIXOFC KNOXVLLE		8	8	7	13	12
L. A.	G-03	.	.	.	1	.
	G-04	.	.	.	.	1
	G-05	2	2	2	.	.
	G-06	1	1	.	.	.
	G-07	4	4	4	1	1
	G-09	1	.	.	2	2
	G-11	.	.	.	.	1
	G-12	22	22	17	11	15
	G-13	4	4	8	8	8
	G-14	.	.	1	1	1
	G-15	1	1	1	1	2
*TOTAL ADMIXOFC L. A.		35	34	33	25	31
LOUISVL	G-06	1	.	.	.	.
	G-07	1	.	.	.	1
	G-09	.	1	.	.	1
	G-11	.	.	1	.	.
	G-12	2	3	3	2	2
	G-13	.	.	.	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC LOUISVL		5	5	5	4	6
LTL ROCK	G-06	2	1	.	.	.
	G-07	.	1	2	2	2
	G-12	4	3	2	2	3
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC LTL ROCK		7	6	5	5	6

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
MIN-STPL	G-05	1	1	.	.	.
	G-06	1	.	1	.	.
	G-07	.	1	1	3	3
	G-12	7	6	5	6	6
	G-13	2	2	2	2	2
	G-14	1	1	1	1	.
	G-15	.	.	.	.	1
*TOTAL ADMIXOFC MIN-STPL		12	11	10	12	12
MLWAUKEE	G-05	1	.	.	.	.
	G-06	1	2	1	.	.
	G-07	.	.	1	2	1
	G-09	.	.	.	.	1
	G-12	6	5	4	1	2
	G-13	3	2	2	2	3
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC MLWAUKEE		12	10	9	6	8
NEW ORLN	G-04	1	1	1	1	.
	G-07	1	1	1	2	2
	G-09	.	.	.	.	2
	G-11	.	1	.	.	.
	G-12	5	6	6	5	5
	G-13	.	.	2	1	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC NEW ORLN		8	10	11	10	10
NEW YORK	G-05	7	7	2	1	1
	G-06	1	1	4	2	1
	G-07	3	3	2	3	4
	G-09	.	.	.	2	.

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
NEW YORK	G-11	2	1	.	.	2
	G-12	18	16	12	8	6
	G-13	7	6	7	7	7
	G-14	1	1	1	1	.
	G-15	1	1	1	2	2
*TOTAL ADMIXOFC NEW YORK		40	36	29	26	23
NEWARK	G-05	2	.	.	.	.
	G-06	2	3	.	.	.
	G-07	.	1	3	3	3
	G-11	1	.	.	.	.
	G-12	16	15	14	13	12
	G-13	4	4	4	2	3
	G-14	.	.	.	1	.
	G-15	1	1	.	.	1
*TOTAL ADMIXOFC NEWARK		26	24	21	19	19
OKLA CTY	G-06	.	1	.	.	.
	G-07	1	1	2	2	1
	G-09	.	1	.	.	.
	G-11	.	1	1	.	.
	G-12	1	1	2	3	3
	G-13	.	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC OKLA CTY		3	7	7	7	6
OMAHA	G-02	.	.	.	1	.
	G-12	3	2	3	3	2
	G-13	2	2	2	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC OMAHA		6	5	6	6	4

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PHILA	G-01	.	.	.	.	1
	G-04	.	.	.	.	1
	G-05	4	3	3	3	2
	G-06	2	1	.	.	.
	G-07	.	1	1	2	1
	G-09	1	1	2	1	1
	G-11	.	.	.	2	.
	G-12	13	13	10	8	7
	G-13	4	4	4	4	3
	G-14	3	2	2	1	1
	G-15	1	2	2	1	1
*TOTAL ADMIXOFC PHILA		28	27	24	22	18
PITTSBRG	G-05	2	.	.	.	.
	G-06	1	3	.	.	.
	G-07	.	.	2	1	1
	G-09	.	.	.	.	1
	G-12	8	8	8	8	7
	G-13	3	3	3	1	2
	G-14	.	.	.	1	.
	G-15	1	1	.	.	1
*TOTAL ADMIXOFC PITTSBRG		15	15	13	11	12
PORTLAND	G-04	.	.	.	1	.
	G-05	.	.	.	1	1
	G-06	1	.	.	.	.
	G-07	.	1	1	.	.
	G-09	1	.	.	.	.
	G-11	.	1	1	1	1
	G-12	5	5	5	5	5
	G-13	.	.	.	1	1
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC PORTLAND		8	8	8	9	8

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PRT RICO	G-05	1	1	1	.	.
	G-06	1	1	.	1	.
	G-07	1	1	2	3	5
	G-12	7	6	5	4	4
	G-13	1	1	2	2	4
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC PRT RICO		12	11	11	11	14
RICHMOND	G-05	1	1	.	.	.
	G-06	1	1	1	.	.
	G-07	.	.	.	2	1
	G-12	7	7	6	6	6
	G-13	1	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC RICHMOND		11	11	9	10	9
SAN FRAN	G-03	.	.	.	1	.
	G-05	2	2	1	.	.
	G-06	.	.	1	.	.
	G-07	3	3	2	4	4
	G-09	.	.	1	.	1
	G-11	1	1	1	1	.
	G-12	14	17	11	12	11
	G-13	6	6	10	9	9
	G-14	1	1	1	1	1
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC SAN FRAN		28	31	29	29	27
SEATTLE	G-05	1	1	.	2	.
	G-06	.	.	1	.	.
	G-07	2	2	2	2	1

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
SEATTLE	G-09	.	.	.	1	1
	G-11	3	1	.	.	1
	G-12	6	8	10	7	7
	G-13	1	1	1	.	1
	G-14	1	1	1	2	2
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC SEATTLE		15	15	16	15	14
SN ANTON	G-05	.	.	.	1	1
	G-06	1	1	.	.	.
	G-07	1	1	2	1	1
	G-09	.	.	.	1	1
	G-12	6	6	5	5	5
	G-13	1	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC SN ANTON		10	10	9	10	10
ST LOUIS	G-01	.	.	.	.	1
	G-04	1	1	.	.	.
	G-05	.	.	1	.	.
	G-07	1	1	1	1	1
	G-12	4	4	4	4	4
	G-13	1	2	1	1	1
	G-14	.	1	2	.	.
	G-15	.	.	.	1	1
*TOTAL ADMIXOFC ST LOUIS		7	9	9	7	8
WASH DC	G-03	1	.	.	.	.
	G-04	.	1	1	.	1
	G-05	1	1	.	.	.
	G-06	1	1	2	1	.

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPD

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
WASH DC	G-07	.	.	.	2	3
	G-09	.	.	.	1	.
	G-11	.	.	1	.	2
	G-12	4	4	4	4	3
	G-13	2	2	1	3	3
	G-14	1	1	1	.	.
	G-15	.	.	.	1	1
*TOTAL ADMIXOFC WASH DC		10	10	10	12	13
*TOTAL DPMTL_MLG CPD		868	849	802	811	824

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPO

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
CPO	G-05	.	.	.	.	1
	G-07	.	.	.	.	4
	G-08	.	.	.	.	1
	G-09	.	.	.	.	1
	G-11	.	.	.	.	7
	G-12	.	.	.	.	2
	G-13	.	.	.	.	11
	G-14	.	.	.	.	9
	G-15	.	.	.	.	4
	*SRES	.	.	.	.	3
*TOTAL ADMIXOFC CPO		0	0	0	0	43
ATLANTA	G-07	.	.	.	.	2
	G-11	.	.	.	.	5
	G-12	.	.	.	.	3
	G-13	.	.	.	.	3
	G-14	.	.	.	.	3
*TOTAL ADMIXOFC ATLANTA		0	0	0	0	16
CHICAGO	G-07	.	.	.	.	2
	G-11	.	.	.	.	1
	G-12	.	.	.	.	7
	G-13	.	.	.	.	2
*TOTAL ADMIXOFC CHICAGO		0	0	0	0	12
DENVER	G-07	.	.	.	.	4
	G-09	.	.	.	.	3
	G-11	.	.	.	.	1
	G-12	.	.	.	.	6
	G-13	.	.	.	.	5
	G-14	.	.	.	.	3

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN CPO

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
*TOTAL ADMIXOFC DENVER		0	0	0	0	22
FT WORTH	G-07	.	.	.	.	1
	G-11	.	.	.	.	2
	G-12	.	.	.	.	3
	G-13	.	.	.	.	1
	G-14	.	.	.	.	1
*TOTAL ADMIXOFC FT WORTH		0	0	0	0	8
KAN CITY	G-12	.	.	.	.	1
NEW YORK	G-07	.	.	.	.	1
	G-09	.	.	.	.	1
	G-11	.	.	.	.	2
	G-12	.	.	.	.	6
	G-13	.	.	.	.	2
	G-14	.	.	.	.	3
*TOTAL ADMIXOFC NEW YORK		0	0	0	0	15
PHILA	G-07	.	.	.	.	2
	G-12	.	.	.	.	4
	G-13	.	.	.	.	1
	G-14	.	.	.	.	1
*TOTAL ADMIXOFC PHILA		0	0	0	0	8
SEATTLE	G-07	.	.	.	.	1
	G-12	.	.	.	.	3
*TOTAL ADMIXOFC SEATTLE		0	0	0	0	4
*TOTAL DPMTL_MLG CPO		0	0	0	0	129

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN DEC

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
DEC	G-01	.	.	.	.	1
	G-05	.	.	.	3	2
	G-06	.	.	.	1	.
	G-07	.	.	.	7	12
	G-08	.	.	.	2	7
	G-09	.	.	.	5	4
	G-10	.	.	.	2	1
	G-11	.	.	.	3	1
	G-12	.	.	.	14	12
	G-13	.	.	.	43	56
	G-14	.	.	.	25	32
	G-15	.	.	.	20	21
	*SRES	.	.	.	1	3
*TOTAL ADMIXOFC DEC		0	0	0	126	152
*TOTAL DPMTL_MLG DEC		0	0	0	126	152

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN DRE

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
DREAC	G-05	.	.	.	.	6
	G-07	.	.	.	8	10
	G-08	.	.	.	2	2
	G-09	.	.	.	3	3
	G-11	.	.	.	4	5
	G-12	.	.	.	8	15
	G-13	.	.	.	28	61
	G-14	.	.	.	15	39
	G-15	.	.	.	15	24
	*SRES	.	.	.	.	2
*TOTAL ADMIXOFC DREAC		0	0	0	83	167
*TOTAL DPMTL_MLG DREAC		0	0	0	83	167

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN FHE

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
FHEO	G-01	.	.	.	2	.
	G-03	.	.	.	1	.
	G-04	1	1	.	1	2
	G-05	1	1	2	.	2
	G-06	6	3	2	1	1
	G-07	17	14	8	10	8
	G-08	9	6	7	4	2
	G-09	10	10	9	9	8
	G-10	3	3	2	3	4
	G-11	9	8	5	1	1
	G-12	8	5	7	4	5
	G-13	55	53	45	39	31
	G-14	24	23	25	22	22
	G-15	32	32	24	21	21
	*SRES	8	8	9	8	7
	*SREX	.	1	.	1	1
*TOTAL ADMIXOFC FHEO		183	168	145	127	115
ALBQRQUE	G-12	.	1	.	.	.
	G-13	.	1	1	1	1
*TOTAL ADMIXOFC ALBQRQUE		0	2	1	1	1
ATLANTA	G-05	4	5	3	1	.
	G-06	2	3	1	1	1
	G-07	3	3	4	5	5
	G-09	2	1	.	.	.
	G-11	1	1	1	.	.
	G-12	22	21	18	21	22
	G-13	6	6	6	6	4
	G-14	4	4	5	4	3
	G-15	2	2	2	3	3
*TOTAL ADMIXOFC ATLANTA		46	46	40	41	38

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN FHE

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
BALTIMOR	G-04	2	2	.	.	.
	G-07	.	1	1	3	2
	G-12	3	3	3	3	2
	G-13	.	1	1	2	3
	G-14	1	1	.	.	.
	G-15	.	.	.	2	2
*TOTAL ADMIXOFC BALTIMOR		6	8	5	10	9
BOSTON	G-04	1	1	1	1	1
	G-05	2	2	1	.	.
	G-06	1	1	.	.	.
	G-07	1	1	2	2	2
	G-09	1	.	.	.	.
	G-11	2	2	.	.	.
	G-12	16	16	18	13	13
	G-13	2	1	1	2	2
	G-14	3	3	4	4	4
	G-15	1	2	3	3	3
*TOTAL ADMIXOFC BOSTON		30	29	30	25	25
BRMNGHAM	G-05	1	.	.	.	.
	G-06	.	1	1	.	.
	G-07	.	.	.	1	1
	G-09	1	.	.	.	.
	G-11	.	1	.	.	.
	G-12	1	1	2	2	2
	G-13	.	.	1	.	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC BRMNGHAM		4	4	5	4	4
BUFFALO	G-07	.	.	.	.	1

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN FHE

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
BUFFALO	G-11	1	1	.	.	.
	G-12	4	3	4	4	4
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC BUFFALO		6	5	5	5	6
CHICAGO	G-04	3	2	.	.	.
	G-05	5	4	3	1	1
	G-06	1	1	5	3	2
	G-07	.	2	2	7	8
	G-11	2	.	1	.	.
	G-12	34	30	26	37	34
	G-13	4	6	8	8	8
	G-14	4	4	4	3	3
	G-15	1	2	2	3	3
*TOTAL ADMIXOFC CHICAGO		54	51	51	62	59
COLUMBIA	G-07	1	1	2	2	2
	G-12	1	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC COLUMBIA		3	3	4	4	4
COLUMBUS	G-04	1	1	.	.	.
	G-06	1	.	.	.	.
	G-07	.	1	1	.	.
	G-09	.	1	.	1	.
	G-11	.	.	.	.	1
	G-12	2	3	3	2	2
	G-13	.	.	.	2	2
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC COLUMBUS		5	7	5	6	6

REPORT: FYPASSN2 P.P. END: 09/27/1997 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN FHE

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
CORAL GB	G-07	.	.	1	2	2
	G-12	.	.	1	.	1
	G-13	.	.	1	2	2
	G-14	.	.	1	2	2
*TOTAL ADMIXOFC CORAL GB		0	0	4	6	7
DENVER	G-04	1	.	.	.	.
	G-05	1	.	.	.	.
	G-06	2	1	.	.	.
	G-07	.	1	3	3	1
	G-09	1	1	1	1	1
	G-11	2	2	2	.	.
	G-12	10	10	10	9	8
	G-13	3	1	1	1	1
	G-14	1	4	4	5	4
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC DENVER		22	21	22	20	16
DETROIT	G-05	1	.	.	.	.
	G-06	.	1	1	1	1
	G-09	.	1	1	1	1
	G-11	.	.	1	2	1
	G-12	1	1	1	4	5
	G-13	1	.	.	.	1
	G-14	.	1	1	1	1
*TOTAL ADMIXOFC DETROIT		3	4	5	9	10
FT WORTH	G-04	3	1	1	.	.
	G-05	4	1	1	.	.
	G-06	2	4	4	2	2
	G-07	1	3	2	7	6

REPORT: FYPASSN2 P.P. END: 09/27/1997 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN FHE

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
FT WORTH	G-09	.	1	3	.	.
	G-11	1	1	2	3	1
	G-12	29	22	22	21	21
	G-13	5	6	7	6	5
	G-14	3	5	4	4	3
	G-15	2	1	2	1	1
*TOTAL ADMIXOFC FT WORTH		50	45	48	44	39
GREENSBR	G-05	1	.	.	.	.
	G-06	.	1	.	.	.
	G-07	.	.	1	1	1
	G-12	2	2	1	1	.
	G-13	1	.	.	.	1
	G-14	.	1	.	.	.
*TOTAL ADMIXOFC GREENSBR		4	4	2	2	2
HARTFORD	G-06	.	.	.	1	1
	G-07	.	.	.	1	1
	G-12	.	.	.	2	2
*TOTAL ADMIXOFC HARTFORD		0	0	0	4	4
HONOLULU	G-12	1	1	.	1	1
HOUSTON	G-13	.	.	.	1	1
INDNAPLS	G-06	1	1	1	.	.
	G-07	.	.	.	1	1
	G-12	1	1	.	2	1
	G-13	.	.	1	1	1

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN FHE(

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
INDNAPLS	G-14	1	1	.	.	.
*TOTAL ADMIXOFC INDNAPLS		3	3	2	4	3
JACKSNVL	G-06	1	.	.	.	.
	G-07	.	1	1	.	.
	G-12	3	4	2	2	2
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC JACKSNVL		5	6	4	3	3
JACKSON	G-05	1	.	.	.	.
	G-06	.	1	1	1	.
	G-12	1	.	.	1	1
	G-13	2	1	1	1	1
	G-14	.	1	1	.	.
*TOTAL ADMIXOFC JACKSON		4	3	3	3	2
KAN CITY	G-05	3	1	.	.	.
	G-06	.	2	2	1	.
	G-07	3	3	2	2	3
	G-09	3	.	1	.	.
	G-11	5	2	.	1	.
	G-12	10	15	17	15	14
	G-13	2	2	2	2	2
	G-14	4	4	4	4	4
	G-15	1	2	2	2	1
*TOTAL ADMIXOFC KAN CITY		31	31	30	27	24
KNOXVLLE	G-05	1	.	.	.	.

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN FHE

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
KNOXVLLE	G-06	.	1	1	.	.
	G-07	.	.	.	.	1
	G-12	1	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC KNOXVLLE		3	3	3	2	3
L. A.	G-05	1	1	1	1	1
	G-06	1	.	.	.	.
	G-07	.	1	1	1	1
	G-11	1	.	.	.	.
	G-12	3	3	3	9	11
	G-13	1	1	1	3	3
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC L. A.		8	7	7	14	16
LOUISVL	G-07	1	.	1	1	1
	G-09	.	1	.	.	.
	G-11	.	.	1	.	.
	G-12	1	1	1	2	2
	G-13	1	.	.	.	.
	G-14	.	1	1	1	1
*TOTAL ADMIXOFC LOUISVL		3	3	4	4	4
LTL ROCK	G-05	1	.	.	.	.
	G-06	.	1	.	.	.
	G-07	.	.	1	1	.
	G-12	2	2	2	3	1
	G-13	.	.	.	.	1
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC LTL ROCK		4	4	4	4	2

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN FHE

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
MIN-STPL	G-06	1	1	.	.	.
	G-12	1	1	.	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC MIN-STPL		3	3	1	2	2
MLWAUKEE	G-05	.	.	.	1	1
	G-06	1	1	1	1	1
	G-11	1	1	1	.	.
	G-12	1	1	1	3	3
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC MLWAUKEE		4	4	4	6	6
NASHVLLE	G-07	.	.	.	1	.
NEW ORLN	G-05	1	.	.	.	.
	G-06	.	1	1	1	.
	G-07	.	.	.	1	2
	G-11	1	.	.	.	.
	G-12	2	3	3	4	4
	G-13	.	.	.	2	2
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC NEW ORLN		5	5	5	9	9
NEW YORK	G-04	1	.	.	.	.
	G-05	3	1	1	.	.
	G-06	2	4	2	2	1
	G-07	2	2	4	3	4
	G-09	2	3	.	.	.
	G-11	.	2	3	1	.
	G-12	17	12	14	10	11

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN FHE

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
NEW YORK	G-13	.	4	4	5	6
	G-14	5	4	4	2	2
	G-15	1	1	2	1	1
*TOTAL ADMIXOFC NEW YORK		33	33	34	24	25
NEWARK	G-06	.	.	.	1	1
	G-12	3	3	2	7	7
	G-13	1	1	1	3	2
	G-14	1	1	1	1	1
	G-15	.	.	.	1	1
*TOTAL ADMIXOFC NEWARK		5	5	4	13	12
OKLA CTY	G-05	.	1	1	1	.
	G-06	1	.	.	.	.
	G-07	.	.	.	.	1
	G-09	.	1	.	.	.
	G-11	.	1	1	.	.
	G-12	1	1	2	2	2
	G-13	.	1	.	.	.
	G-14	.	.	1	1	1
*TOTAL ADMIXOFC OKLA CTY		2	5	5	4	4
OMAHA	G-06	1	1	.	.	.
	G-07	.	.	1	2	2
	G-12	2	2	2	3	2
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC OMAHA		4	4	4	6	5

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN FHE(

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PHILA	G-04	2	.	.	.	.
	G-05	3	2	2	.	.
	G-06	1	3	1	.	.
	G-07	.	1	4	3	2
	G-09	4	1	2	3	1
	G-11	1	1	1	.	3
	G-12	16	17	14	14	13
	G-13	5	5	6	5	5
	G-14	3	4	2	2	3
	G-15	1	2	3	2	.
*TOTAL ADMIXOFC PHILA		36	36	35	29	27
PITTSBRG	G-03	1	.	.	.	.
	G-04	.	1	.	.	.
	G-05	.	.	1	.	.
	G-06	.	.	.	1	.
	G-07	1	.	.	.	1
	G-09	.	1	.	.	.
	G-11	.	.	1	.	.
	G-12	4	5	4	5	5
	G-13	.	.	1	1	1
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC PITTSBRG		7	8	8	7	7
PORTLAND	G-11	.	.	.	1	.
	G-12	.	.	.	1	2
	G-13	.	.	.	1	1
*TOTAL ADMIXOFC PORTLAND		0	0	0	3	3
PRT RICO	G-05	1	.	.	.	.
	G-06	.	1	1	1	1

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN FHE(

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PRT RICO	G-12	1	1	1	1	.
	G-13	1	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC PRT RICO		4	4	4	4	3
RICHMOND	G-05	1	.	.	.	.
	G-06	.	1	.	.	.
	G-07	.	.	.	1	1
	G-12	2	1	1	3	3
	G-13	1	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC RICHMOND		5	4	3	6	6
SAN FRAN	G-04	1	1	.	.	.
	G-05	5	2	3	2	2
	G-06	2	3	1	1	1
	G-07	3	3	4	2	3
	G-09	2	.	.	1	.
	G-11	5	2	2	1	1
	G-12	23	25	25	20	20
	G-13	6	5	6	5	4
	G-14	3	4	4	3	4
	G-15	2	2	2	2	1
*TOTAL ADMIXOFC SAN FRAN		52	47	47	37	36
SEATTLE	G-04	1	1	1	1	1
	G-06	5	3	.	2	2
	G-07	2	1	2	4	2
	G-09	4	3	2	.	.
	G-11	3	4	3	2	1
	G-12	9	11	11	11	11

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN FHE

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
SEATTLE	G-13	2	1	2	1	1
	G-14	2	4	4	4	4
	G-15	2	2	2	2	2
*TOTAL ADMIXOFC SEATTLE		30	30	27	27	24
SN ANTON	G-05	.	.	.	1	.
	G-06	1	.	.	.	.
	G-07	.	1	1	6	4
	G-11	.	.	.	1	1
	G-12	4	3	2	4	4
	G-13	.	.	1	2	2
	G-14	1	1	.	.	.
*TOTAL ADMIXOFC SN ANTON		6	5	4	14	11
ST LOUIS	G-07	1	1	1	1	1
	G-09	1	.	.	.	.
	G-11	.	1	.	.	.
	G-12	1	1	2	3	3
	G-14	1	1	1	1	.
*TOTAL ADMIXOFC ST LOUIS		4	4	4	5	4
WASH DC	G-04	.	.	.	1	1
	G-05	1	.	.	.	.
	G-06	.	.	.	1	1
	G-12	1	1	1	1	.
	G-13	2	1	1	.	1
	G-14	.	1	1	1	1
*TOTAL ADMIXOFC WASH DC		4	3	3	4	4
*TOTAL DPMTL_MLG FHEO		682	658	621	634	592

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GEN CN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
GEN CNSL	G-02	.	.	.	4	1
	G-03	.	.	.	.	2
	G-04	1	2	2	.	5
	G-05	1	1	1	1	1
	G-06	5	3	.	.	1
	G-07	9	9	5	4	4
	G-08	11	8	11	9	9
	G-09	9	8	8	7	7
	G-10	11	9	11	12	11
	G-11	19	25	17	18	9
	G-12	20	11	14	11	19
	G-13	7	18	19	12	13
	G-14	47	48	39	41	39
	G-15	73	71	70	57	59
	*SRES	10	9	12	10	11
	*SREX	1	1	.	1	1
*TOTAL ADMIXOFC GEN CNSL		224	223	209	187	192
ALBQRQUE	G-01	.	.	.	.	2
	G-13	1	.	.	.	.
	G-14	.	1	1	1	1
*TOTAL ADMIXOFC ALBQRQUE		1	1	1	1	3
ANCHRAGE	G-06	1	.	.	.	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC ANCHRAGE		2	1	1	0	0
ATLANTA	G-05	1	1	1	.	.
	G-06	1	1	.	.	.
	G-07	3	3	3	2	3
	G-08	.	.	1	1	.

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GEN CI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
ATLANTA	G-11	1	1	1	1	.
	G-12	.	.	.	1	2
	G-13	6	5	4	1	1
	G-14	9	8	10	12	12
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC ATLANTA		22	20	21	19	19
BALTIMOR	G-06	.	.	1	.	.
	G-07	1	.	.	.	.
	G-13	2	3	3	2	1
	G-14	1	1	1	.	1
*TOTAL ADMIXOFC BALTIMOR		4	4	5	2	2
BOSTON	G-04	4	5	2	1	2
	G-05	.	.	1	1	1
	G-06	2	1	2	.	.
	G-07	2	1	2	2	2
	G-11	1	2	1	2	1
	G-12	.	.	1	.	1
	G-13	10	10	9	7	7
	G-14	5	4	5	7	7
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC BOSTON		25	24	24	21	22
BRMNGHAM	G-06	1	.	.	.	.
	G-07	.	1	1	.	.
	G-13	1	1	1	.	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC BRMNGHAM		3	3	3	1	1

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GEN CN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
BUFFALO	G-05	1	.	.	.	.
	G-06	1	1	.	.	.
	G-07	.	1	2	2	2
	G-11	1	1	1	.	.
	G-13	2	2	2	2	2
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC BUFFALO		6	6	6	5	5
CHICAGO	G-05	1	1	.	.	.
	G-06	1	.	1	1	1
	G-07	.	.	2	.	.
	G-08	5	5	.	1	1
	G-09	.	.	3	3	3
	G-11	.	.	.	1	.
	G-12	1	.	.	.	1
	G-13	10	10	9	9	8
	G-14	7	7	7	6	6
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC CHICAGO		26	24	23	22	21
CLEVELND	G-07	1	.	.	.	.
	G-09	.	1	1	1	1
	G-13	1	2	2	2	1
	G-14	.	.	.	1	1
*TOTAL ADMIXOFC CLEVELND		2	3	3	4	3
CNCINATI	G-09	1	1	1	.	.
	G-13	1	1	1	.	.
*TOTAL ADMIXOFC CNCINATI		2	2	2	0	0

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GEN CT

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
COLUMBIA	G-07	1	1	1	1	1
	G-13	1	1	1	1	.
	G-14	1	1	1	.	1
*TOTAL ADMIXOFC COLUMBIA		3	3	3	2	2
COLUMBUS	G-01	.	.	.	.	1
	G-09	1	1	.	.	.
	G-13	1	1	1	.	.
	G-14	1	1	.	1	1
*TOTAL ADMIXOFC COLUMBUS		3	3	1	1	2
CORAL GB	G-14	.	.	.	2	2
DENVER	G-05	.	.	1	.	.
	G-07	3	2	.	1	1
	G-09	1	1	1	.	.
	G-11	.	.	1	1	1
	G-12	2	2	2	1	1
	G-13	4	4	5	2	2
	G-14	1	1	2	5	5
	G-15	1	1	2	2	2
*TOTAL ADMIXOFC DENVER		12	11	14	12	12
DES MOIN	G-06	1	.	.	.	.
	G-13	1	.	.	.	.
*TOTAL ADMIXOFC DES MOIN		2	0	0	0	0

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GEN CN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
DETROIT	G-05	1	1	.	.	.
	G-06	.	.	1	.	.
	G-07	.	.	.	1	1
	G-11	2	.	.	.	.
	G-13	1	2	2	2	2
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC DETROIT		5	4	4	4	4
FT WORTH	G-05	1	1	.	.	.
	G-06	.	.	1	.	.
	G-07	3	2	3	3	1
	G-09	.	.	.	.	2
	G-11	3	3	.	.	1
	G-12	.	.	3	3	2
	G-13	3	3	3	3	3
	G-14	4	4	5	4	6
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC FT WORTH		15	14	16	14	16
GREENSBR	G-08	1	1	1	.	.
	G-13	1	1	1	1	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC GREENSBR		3	3	3	2	1
HARTFORD	G-06	1	1	.	.	.
	G-07	.	.	1	1	1
	G-13	1	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC HARTFORD		3	3	3	3	3

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GEN CN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
HONOLULU	G-14	1	1	1	1	1
HOUSTON	G-07	1	1	1	1	1
	G-13	2	2	2	.	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC HOUSTON		4	4	4	2	2
INDNAPLS	G-06	1	1	.	.	.
	G-07	.	.	1	.	.
	G-13	1	1	1	1	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC INDNAPLS		3	3	3	2	1
JACKSNVL	G-08	1	1	1	1	1
	G-13	2	2	2	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC JACKSNVL		4	4	4	3	3
JACKSON	G-08	1	1	1	.	.
	G-12	1	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC JACKSON		3	3	3	2	2
KAN CITY	G-05	1	1	1	.	.
	G-07	2	1	1	1	2
	G-08	.	1	1	1	.
	G-12	2	.	.	.	.

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GEN CI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
KAN CITY	G-13	3	5	4	3	3
	G-14	2	2	3	3	3
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC KAN CITY		11	11	11	9	9
KNOXVLLE	G-07	1	1	.	.	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC KNOXVLLE		2	2	1	1	1
L. A.	G-03	.	.	.	.	1
	G-06	1	1	.	.	.
	G-07	.	.	.	.	1
	G-09	.	.	.	.	1
	G-11	2	2	3	1	.
	G-13	2	2	2	2	.
	G-14	1	1	1	1	1
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC L. A.		7	7	7	5	5
LOUISVL	G-06	1	1	.	.	.
	G-07	1	.	.	.	.
	G-08	.	1	.	.	.
	G-13	1	.	.	.	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC LOUISVL		4	3	1	1	1
LTL ROCK	G-13	1	1	1	1	1
	G-14	1	1	1	1	1

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GEN CN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
*TOTAL ADMIXOFC LTL ROCK		2	2	2	2	2
MIN-STPL	G-05	1	.	.	.	.
	G-09	1	1	1	1	1
	G-13	1	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC MIN-STPL		4	3	3	3	3
MLWAUKEE	G-06	1	1	1	1	.
	G-09	1	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC MLWAUKEE		3	3	3	3	2
NASHVLLE	G-08	1	1	1	.	.
	G-13	1	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC NASHVLLE		3	3	3	2	2
NEW ORLN	G-05	1	1	1	1	1
	G-11	1	1	.	.	.
	G-12	.	.	1	1	1
	G-14	1	1	1	1	.
*TOTAL ADMIXOFC NEW ORLN		3	3	3	3	2
NEW YORK	G-03	.	.	.	2	.
	G-04	.	.	.	.	2

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GEN CI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
NEW YORK	G-05	1	1	1	.	.
	G-07	1	1	1	1	1
	G-11	3	2	2	1	.
	G-12	1	3	1	1	1
	G-13	4	3	5	3	2
	G-14	6	5	5	4	7
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC NEW YORK		17	16	16	13	14
NEWARK	G-07	1	1	1	1	1
	G-13	3	3	3	2	2
	G-14	1	1	.	.	1
	G-15	.	.	1	.	.
*TOTAL ADMIXOFC NEWARK		5	5	5	3	4
OKLA CTY	G-05	1	1	1	.	.
	G-07	.	1	1	.	.
	G-09	.	.	.	1	1
	G-13	1	1	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC OKLA CTY		3	4	4	3	3
OMAHA	G-07	1	1	.	.	.
	G-08	.	.	1	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC OMAHA		2	2	2	2	2
PHILA	G-06	2	1	1	.	.

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GEN CN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PHILA	G-07	2	3	1	1	1
	G-08	.	.	1	1	1
	G-11	1	2	1	2	1
	G-12	1	.	.	.	.
	G-13	5	4	4	3	.
	G-14	8	7	8	9	12
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC PHILA		20	18	17	17	16
PHOENIX	G-11	1	1	.	.	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC PHOENIX		2	2	1	1	1
PITTSBRG	G-09	1	1	1	.	.
	G-13	2	2	2	2	2
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC PITTSBRG		4	4	4	3	3
PORTLAND	G-07	1	1	1	1	1
	G-13	1	1	1	.	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC PORTLAND		3	3	3	2	2
PRT RICO	G-05	1	1	1	.	.
	G-07	1	1	1	.	.
	G-09	1	.	.	.	.
	G-11	.	1	.	.	.
	G-12	.	.	1	.	.

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GEN CN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PRT RICO	G-13	.	.	.	1	1
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC PRT RICO		4	4	4	2	2
RICHMOND	G-01	.	.	.	.	1
	G-07	1	1	1	.	.
	G-14	1	1	.	1	1
*TOTAL ADMIXOFC RICHMOND		2	2	1	1	2
SACRMNTO	G-07	1	1	1	.	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC SACRMNTO		2	2	2	0	0
SAN FRAN	G-05	2	1	1	.	.
	G-08	.	1	1	.	.
	G-09	2	2	2	3	2
	G-11	.	.	.	1	2
	G-12	1	1	1	.	.
	G-13	7	7	9	5	3
	G-14	7	7	7	8	7
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC SAN FRAN		20	20	22	18	15
SEATTLE	G-05	1	1	1	.	.
	G-06	.	1	.	.	.
	G-07	2	1	1	1	1
	G-09	1	1	1	.	.
	G-11	.	.	.	1	.

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GEN CN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
SEATTLE	G-12	.	.	.	.	1
	G-13	4	5	2	2	2
	G-14	1	1	3	2	2
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC SEATTLE		10	11	9	7	7
SN ANTON	G-07	.	.	1	.	.
	G-13	1	1	1	.	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC SN ANTON		2	2	3	1	1
ST LOUIS	G-06	1	1	1	1	1
	G-12	1	1	.	.	.
	G-13	1	.	1	1	1
	G-14	.	1	1	1	1
*TOTAL ADMIXOFC ST LOUIS		3	3	3	3	3
WASH DC	G-01	.	.	.	.	1
	G-09	1	1	1	1	.
	G-13	3	3	3	1	.
	G-14	.	.	.	1	1
	G-15	1	1	.	.	.
*TOTAL ADMIXOFC WASH DC		5	5	4	3	2
*TOTAL DPMTL_MLG GEN CNSL		521	507	491	420	423

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN GNMA

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
GNMA	G-01	.	.	.	.	1
	G-05	.	.	.	.	1
	G-06	2	2	3	.	.
	G-07	4	5	4	6	5
	G-08	.	.	1	1	1
	G-09	5	4	2	1	1
	G-10	1	1	2	1	.
	G-11	4	4	3	4	4
	G-12	5	3	2	2	2
	G-13	18	19	19	18	17
	G-14	10	12	13	11	13
	G-15	10	9	9	6	8
	*SRES	5	3	5	5	5
	*SREX	1	1	1	.	.
*TOTAL ADMIXOFC GNMA		65	63	64	55	58
*TOTAL DPMTL_MLG GNMA		65	63	64	55	58

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
HOUSING	G-01	.	.	1	3	.
	G-02	.	.	.	6	2
	G-03	2	1	.	2	2
	G-04	31	24	9	6	7
	G-05	34	30	20	19	13
	G-06	39	34	29	26	18
	G-07	62	62	52	35	34
	G-08	29	27	18	13	12
	G-09	36	29	29	31	22
	G-10	3	5	7	7	7
	G-11	96	99	75	84	88
	G-12	133	125	102	95	84
	G-13	207	214	221	159	157
	G-14	129	111	96	82	74
	G-15	81	81	74	67	72
	*SRES	15	15	15	12	10
	*SREX	1	1	1	.	1
*TOTAL ADMIXOFC	HOUSING	898	858	749	647	603
ALBANY	G-04	1	.	.	.	.
	G-05	10	9	5	2	1
	G-06	2	3	.	3	.
	G-07	5	3	6	6	6
	G-08	1	1	1	1	1
	G-09	1	3	.	.	.
	G-11	34	24	26	17	13
	G-12	9	17	17	21	20
	G-13	2	3	3	2	4
	G-14	2	2	2	1	2
*TOTAL ADMIXOFC	ALBANY	67	65	60	53	47
ALBQRQUE	G-03	.	1	1	1	.
	G-05	2	5	.	.	.
	G-06	8	1	.	.	.

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
ALBQRQUE	G-07	.	2	6	2	2
	G-09	.	.	.	1	1
	G-11	5	1	.	.	1
	G-12	6	7	4	3	2
	G-13	2	2	2	1	1
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC ALBQRQUE		24	20	14	8	7
ANCHRAGE	G-05	1	.	.	.	.
	G-06	2	1	.	.	.
	G-07	.	2	2	.	.
	G-09	1	.	1	.	.
	G-11	4	2	.	.	.
	G-12	5	6	5	4	4
	G-13	2	2	2	.	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC ANCHRAGE		16	14	11	4	4
ATLANTA	G-01	.	.	.	1	2
	G-02	.	.	.	.	1
	G-03	.	.	.	3	.
	G-04	1	1	.	.	3
	G-05	19	13	10	6	3
	G-06	8	2	5	3	.
	G-07	26	32	28	40	40
	G-09	7	7	3	10	4
	G-11	33	5	6	6	11
	G-12	43	60	69	133	140
	G-13	20	24	25	62	65
	G-14	5	6	5	19	19
	G-15	2	2	2	2	4
*TOTAL ADMIXOFC ATLANTA		164	152	153	285	292

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
BALTIMOR	G-01	.	2	.	.	.
	G-03	.	.	1	.	.
	G-04	3	3	1	1	.
	G-05	9	1	.	.	.
	G-06	6	7	.	.	.
	G-07	5	7	13	9	9
	G-09	.	3	.	.	.
	G-11	23	2	3	.	.
	G-12	19	39	34	13	13
	G-13	5	7	7	6	5
	G-14	3	3	3	3	3
	G-15	1	1	1	2	2
*TOTAL ADMIXOFC BALTIMOR		74	75	63	34	32
BANGOR	G-06	1	.	.	.	.
	G-07	.	1	1	.	.
	G-12	2	1	1	.	.
*TOTAL ADMIXOFC BANGOR		3	2	2	0	0
BOISE	G-05	1	1	1	.	.
	G-07	1	.	.	.	.
	G-11	3	.	.	.	.
	G-12	7	10	9	.	.
	G-13	.	1	.	.	.
	G-14	1	.	1	.	.
*TOTAL ADMIXOFC BOISE		13	12	11	0	0
BOSTON	G-04	1	1	.	.	.
	G-05	8	6	1	1	1
	G-06	5	4	.	3	2
	G-07	7	8	10	6	4

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
BOSTON	G-09	4	5	.	1	.
	G-11	6	1	4	.	1
	G-12	40	29	26	25	17
	G-13	16	28	27	17	18
	G-14	3	4	4	4	4
	G-15	2	2	1	1	1
*TOTAL ADMIXOFC BOSTON		92	88	73	58	48
BRMNGHAM	G-02	.	.	.	1	.
	G-04	1	.	.	.	1
	G-05	4	4	2	2	1
	G-06	8	1	.	.	.
	G-07	8	13	7	5	4
	G-09	1	.	1	.	.
	G-11	1	2	.	.	.
	G-12	40	35	23	14	12
	G-13	5	7	9	6	7
	G-14	4	3	2	2	2
	G-15	.	1	1	.	.
*TOTAL ADMIXOFC BRMNGHAM		72	66	45	30	27
BUFFALO	G-02	2	.	.	.	.
	G-03	1	1	.	.	.
	G-04	.	1	1	.	.
	G-05	4	.	1	2	.
	G-06	7	5	.	.	.
	G-07	5	11	15	8	8
	G-11	2	2	2	2	1
	G-12	29	25	23	21	20
	G-13	8	9	8	2	4
	G-14	1	4	3	3	3
	G-15	1	.	1	1	1
*TOTAL ADMIXOFC BUFFALO		60	58	54	39	37

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
BURLGTN	G-12	1	1	1	.	.
CAMDEN	G-04	1	3	.	.	.
	G-05	3	1	1	.	.
	G-06	2	1	.	.	.
	G-07	.	2	1	1	.
	G-11	10	1	1	.	.
	G-12	3	11	11	.	.
	G-13	1	3	3	.	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC CAMDEN		21	23	18	1	0
CASPER	G-05	1	.	.	.	.
	G-06	2	1	.	.	.
	G-07	1	3	5	.	.
	G-12	1	.	.	.	.
	G-13	1	1	.	.	.
*TOTAL ADMIXOFC CASPER		6	5	5	0	0
CHARLSTN	G-05	1	.	.	.	.
	G-06	4	2	1	1	.
	G-07	1	3	3	1	1
	G-09	.	.	.	1	.
	G-11	2	.	.	.	1
	G-12	9	11	9	7	7
	G-13	.	.	2	1	1
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC CHARLSTN		18	17	16	11	10
CHICAGO	G-02	.	.	.	1	.

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
CHICAGO	G-04	1	.	.	.	1
	G-05	35	18	9	2	2
	G-06	20	12	2	.	.
	G-07	21	32	40	19	17
	G-08	.	1	1	.	.
	G-09	25	14	.	.	.
	G-11	46	25	34	.	.
	G-12	54	84	80	35	30
	G-13	13	16	18	55	38
	G-14	6	6	6	10	10
	G-15	2	2	2	2	1
*TOTAL ADMIXOFC CHICAGO		223	210	192	124	99
CLEVELND	G-05	21	19	6	1	.
	G-06	6	2	5	.	.
	G-07	3	9	11	5	4
	G-09	6	3	6	4	1
	G-11	16	4	2	3	6
	G-12	32	40	38	22	22
	G-13	4	9	12	5	6
	G-14	3	2	4	2	2
	G-15	.	1	1	.	.
*TOTAL ADMIXOFC CLEVELND		91	89	85	42	41
CNCINATI	G-03	1	.	.	.	.
	G-04	1	1	.	.	.
	G-05	6	5	.	.	.
	G-06	2	.	2	.	.
	G-07	2	3	1	.	.
	G-09	3	3	3	.	.
	G-11	2	2	2	.	.
	G-12	19	18	16	.	.
	G-13	3	4	3	2	.
	G-14	1	2	2	1	.

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
*TOTAL ADMIXOFC CNCINATI		40	38	29	3	0
COLUMBIA	G-02	.	.	.	1	.
	G-03	.	.	.	.	1
	G-04	1	1	.	.	.
	G-05	.	1	.	.	.
	G-06	13	2	.	.	.
	G-07	5	13	16	9	9
	G-09	3	1	.	.	.
	G-11	16	8	2	.	1
	G-12	16	25	30	18	19
	G-13	6	7	8	4	3
	G-14	3	3	3	1	1
*TOTAL ADMIXOFC COLUMBIA		63	61	59	33	34
COLUMBUS	G-01	.	.	.	1	.
	G-04	2	2	.	.	.
	G-05	8	6	4	1	.
	G-06	6	4	1	1	.
	G-07	.	5	5	7	4
	G-09	3	.	.	.	4
	G-11	11	3	9	4	.
	G-12	25	29	22	29	33
	G-13	6	9	5	5	8
	G-14	3	3	3	4	3
	G-15	1	1	.	1	1
*TOTAL ADMIXOFC COLUMBUS		65	62	49	53	53
CORAL GB	G-02	.	1	.	.	.
	G-03	.	1	.	.	.
	G-04	2	3	2	.	.
	G-05	10	10	4	.	.

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
CORAL GB	G-06	12	3	2	.	.
	G-07	1	9	7	2	1
	G-09	.	.	1	.	.
	G-11	26	1	.	.	.
	G-12	4	24	17	7	4
	G-13	2	2	3	3	2
	G-14	.	1	1	1	1
*TOTAL ADMIXOFC CORAL GB		57	55	37	13	8
DALLAS	G-05	4	2	2	.	.
	G-06	3	.	.	.	.
	G-07	1	3	2	.	.
	G-09	3	2	1	.	.
	G-11	1	.	2	.	.
	G-12	16	15	13	1	.
	G-13	1	3	3	.	.
*TOTAL ADMIXOFC DALLAS		29	25	23	1	0
DENVER	G-01	.	.	.	1	.
	G-02	.	.	.	.	1
	G-03	.	.	.	2	.
	G-04	2	2	.	.	2
	G-05	16	10	9	12	10
	G-06	16	4	1	1	1
	G-07	32	42	31	78	74
	G-08	1	1	.	1	.
	G-09	9	9	13	12	4
	G-10	1	1	1	1	1
	G-11	13	6	3	12	12
	G-12	113	109	99	167	165
	G-13	10	19	32	75	73
	G-14	6	7	9	15	14
	G-15	2	3	2	2	2
*TOTAL ADMIXOFC DENVER		221	213	200	379	359

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
DES MOIN	G-05	4	3	1	.	.
	G-06	5	2	.	.	.
	G-07	3	5	8	2	2
	G-09	2	4	1	2	1
	G-11	2	2	4	1	1
	G-12	14	10	9	8	9
	G-13	4	5	5	2	2
	G-14	3	3	2	1	1
*TOTAL ADMIXOFC DES MOIN		37	34	30	16	16
DETROIT	G-04	1	.	.	.	.
	G-05	9	6	2	1	1
	G-06	16	3	.	.	.
	G-07	4	20	20	15	14
	G-09	4	5	.	1	.
	G-11	22	3	7	4	3
	G-12	34	49	40	37	38
	G-13	7	10	7	7	8
	G-14	2	2	1	2	3
	G-15	2	2	2	1	1
*TOTAL ADMIXOFC DETROIT		101	100	79	68	68
FARGO	G-06	1	.	.	.	.
	G-07	1	2	1	.	.
	G-12	5	4	3	.	.
	G-13	1	1	1	.	.
*TOTAL ADMIXOFC FARGO		8	7	5	0	0
FLINT	G-05	3	.	.	.	.
	G-06	2	2	.	.	.
	G-07	.	.	2	.	.

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
FLINT	G-11	3	.	.	.	.
	G-12	7	9	3	.	.
	G-13	.	1	.	.	.
	G-14	1	.	.	.	.
*TOTAL ADMIXOFC FLINT		16	12	5	0	0
FRESNO	G-05	1	2	.	.	.
	G-06	4	1	.	.	.
	G-07	4	7	6	.	.
	G-09	2	.	2	.	.
	G-11	2	2	.	.	.
	G-12	12	9	9	.	.
	G-13	1	1	2	.	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC FRESNO		27	23	20	0	0
FT WORTH	G-01	.	1	.	.	.
	G-02	.	1	.	.	.
	G-04	2	1	.	.	.
	G-05	17	19	12	4	.
	G-06	34	5	1	1	1
	G-07	9	37	34	18	14
	G-09	7	7	5	5	4
	G-11	8	3	7	8	7
	G-12	61	58	47	31	32
	G-13	8	12	10	10	12
	G-14	3	4	6	5	4
	G-15	2	2	1	1	2
*TOTAL ADMIXOFC FT WORTH		151	150	123	83	76
GREENSBR	G-04	.	1	.	1	.

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
GREENSBR	G-05	13	6	3	1	2
	G-06	8	4	2	.	.
	G-07	12	22	17	15	16
	G-09	4	4	6	.	.
	G-11	15	2	5	6	1
	G-12	38	48	45	33	33
	G-13	6	9	9	6	7
	G-14	1	3	3	4	4
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC GREENSBR		98	100	91	67	64
GRND RPD	G-01	.	1	.	.	.
	G-05	4	3	1	.	.
	G-06	6	.	.	.	.
	G-07	3	10	7	.	.
	G-09	1	.	1	.	.
	G-11	5	3	1	.	.
	G-12	19	18	12	.	.
	G-13	4	5	4	.	.
	G-14	1	1	.	.	.
	G-15	.	.	1	.	.
*TOTAL ADMIXOFC GRND RPD		43	41	27	0	0
HARTFORD	G-03	.	1	.	.	.
	G-04	1	.	.	.	.
	G-05	3	2	1	.	.
	G-06	6	3	2	.	.
	G-07	4	9	6	4	2
	G-09	2	1	4	1	.
	G-11	7	5	2	1	.
	G-12	21	18	20	15	11
	G-13	5	8	5	5	5
	G-14	2	3	3	2	2
	G-15	1	1	1	1	1

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
*TOTAL ADMIXOFC HARTFORD		52	51	44	29	21
HELENA	G-06	2	.	.	.	.
	G-07	1	2	1	.	.
	G-11	3	.	.	.	.
	G-12	4	7	3	1	.
	G-13	2	.	1	.	.
	G-14	.	1	1	.	.
*TOTAL ADMIXOFC HELENA		12	10	6	1	0
HONOLULU	G-01	.	.	.	1	.
	G-04	1	1	1	.	1
	G-05	1	2	.	1	.
	G-07	2	2	1	1	1
	G-09	1	.	.	.	.
	G-11	1	2	1	.	.
	G-12	11	8	9	5	4
	G-13	.	2	2	2	2
	G-14	2	2	2	.	.
*TOTAL ADMIXOFC HONOLULU		19	19	16	10	8
HOUSTON	G-05	5	3	.	.	.
	G-06	26	5	1	.	.
	G-07	7	28	21	9	9
	G-09	1	1	3	2	2
	G-11	.	.	1	2	1
	G-12	41	32	30	20	20
	G-13	2	6	6	3	3
	G-14	4	4	4	1	1
	G-15	.	1	1	.	.
*TOTAL ADMIXOFC HOUSTON		86	80	67	37	36

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
INDNAPLS	G-04	2	.	.	.	.
	G-05	11	5	3	2	1
	G-06	6	8	1	.	.
	G-07	3	6	13	9	9
	G-09	7	2	.	.	.
	G-11	16	7	2	.	.
	G-12	26	36	37	19	18
	G-13	4	8	8	6	5
	G-14	3	1	3	.	.
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC INDNAPLS		79	74	68	37	34
JACKSNVL	G-05	4	1	1	.	.
	G-06	11	1	.	.	.
	G-07	7	17	15	16	20
	G-09	1	1	3	.	.
	G-11	3	1	3	3	.
	G-12	44	42	35	33	32
	G-13	9	10	11	8	9
	G-14	3	3	3	2	2
	G-15	.	2	2	2	2
*TOTAL ADMIXOFC JACKSNVL		82	78	73	64	65
JACKSON	G-04	1	.	.	.	.
	G-05	4	4	3	2	2
	G-06	7	.	.	.	.
	G-07	6	13	11	6	5
	G-09	2	2	2	2	.
	G-11	12	2	1	1	1
	G-12	15	19	20	11	10
	G-13	2	6	5	4	4
	G-14	2	2	1	1	1
*TOTAL ADMIXOFC JACKSON		51	48	43	27	23

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SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
KAN CITY	G-02	.	1	.	.	.
	G-04	3	.	.	.	.
	G-05	6	.	.	.	.
	G-06	6	5	2	1	.
	G-07	14	15	17	6	7
	G-09	3	6	7	9	.
	G-11	3	5	2	.	.
	G-12	42	40	32	18	12
	G-13	20	21	22	12	13
	G-14	5	4	3	5	4
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC KAN CITY		103	98	86	52	37
KNOXVLLE	G-05	3	4	1	.	.
	G-06	7	1	1	.	.
	G-07	6	12	4	.	.
	G-09	.	.	5	.	.
	G-11	1	.	.	3	.
	G-12	20	19	15	10	12
	G-13	2	6	6	2	2
	G-14	2	2	2	1	.
*TOTAL ADMIXOFC KNOXVLLE		41	44	34	16	14
L. A.	G-04	6	.	.	.	.
	G-05	19	20	14	2	.
	G-06	4	.	2	1	.
	G-07	13	17	11	14	12
	G-09	7	2	3	.	1
	G-11	21	5	3	4	.
	G-12	44	57	55	41	39
	G-13	8	9	10	8	10
	G-14	3	3	3	4	4
	G-15	.	2	2	1	.
*TOTAL ADMIXOFC L. A.		125	115	103	75	66

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SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
LAS VGAS	G-04	1	.	.	.	.
	G-05	4	4	1	1	.
	G-06	2	.	.	.	.
	G-07	2	5	5	.	.
	G-09	.	.	1	.	.
	G-11	3	1	1	1	1
	G-12	5	11	10	3	3
	G-13	1	2	1	.	1
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC LAS VGAS		19	24	20	5	5
LOUISVL	G-03	.	1	.	.	.
	G-04	1	.	1	.	.
	G-05	5	2	.	.	.
	G-06	7	1	1	.	.
	G-07	2	8	8	4	3
	G-09	4	3	3	1	1
	G-11	5	1	1	2	.
	G-12	21	17	17	13	15
	G-13	3	4	7	4	4
	G-14	2	4	2	1	1
	G-15	1	1	1	.	.
*TOTAL ADMIXOFC LOUISVL		51	42	41	25	24
LTL ROCK	G-03	.	2	.	.	.
	G-04	3	3	.	.	.
	G-05	4	3	3	1	.
	G-06	9	.	.	.	.
	G-07	1	10	8	5	4
	G-12	28	28	23	14	12
	G-13	3	5	4	3	2
	G-14	2	3	3	1	1
*TOTAL ADMIXOFC LTL ROCK		50	54	41	24	19

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SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
LUBBOCK	G-03	.	2	.	.	.
	G-04	2	1	.	.	.
	G-05	2	1	.	.	.
	G-06	4	.	1	1	.
	G-07	2	4	3	.	.
	G-09	1	2	.	.	.
	G-11	1	.	1	.	.
	G-12	13	9	6	.	.
	G-13	.	3	3	.	.
	G-14	.	1	1	.	.
*TOTAL ADMIXOFC LUBBOCK		25	23	15	1	0
MANCHSTR	G-04	1	.	.	.	.
	G-06	3	2	1	1	1
	G-07	5	3	1	2	2
	G-09	1	3	2	1	1
	G-11	2	3	3	2	2
	G-12	13	5	3	3	4
	G-13	4	9	11	9	9
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC MANCHSTR		30	26	22	18	19
MEMPHIS	G-04	1	2	.	.	.
	G-05	9	6	5	.	.
	G-06	6	1	.	.	.
	G-07	1	6	5	.	.
	G-09	1	1	.	.	.
	G-12	18	17	17	.	.
	G-13	2	3	3	1	.
	G-14	.	1	1	.	.
*TOTAL ADMIXOFC MEMPHIS		38	37	31	1	0

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
MIN-STPL	G-02	.	.	.	.	1
	G-03	3	2	.	.	.
	G-04	7	5	3	.	.
	G-05	13	5	3	.	.
	G-06	5	7	2	.	.
	G-07	5	8	12	7	7
	G-09	3	.	.	.	.
	G-11	9	4	6	.	.
	G-12	38	36	28	18	17
	G-13	2	7	8	7	7
	G-14	3	3	3	3	3
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC MIN-STPL		89	78	66	36	36
MLWAUKEE	G-05	10	9	.	.	.
	G-06	5	5	8	.	.
	G-07	2	3	7	9	8
	G-09	2	2	2	2	2
	G-11	13	5	3	.	.
	G-12	15	22	22	16	16
	G-13	7	7	7	5	4
	G-15	.	1	1	1	1
*TOTAL ADMIXOFC MLWAUKEE		54	54	50	33	31
NASHVLLE	G-04	1	1	.	.	.
	G-05	3	3	1	.	.
	G-06	7	1	.	.	.
	G-07	8	10	10	7	7
	G-09	2	4	1	.	.
	G-11	1	1	2	.	.
	G-12	32	31	28	21	17
	G-13	6	8	5	5	5
	G-14	2	1	.	.	.
	G-15	.	.	1	1	1

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
*TOTAL ADMIXOFC NASHVLLE		62	60	48	34	30
NEW ORLN	G-04	1	.	.	.	.
	G-05	3	3	3	1	.
	G-06	8	2	1	.	.
	G-07	3	10	8	7	8
	G-09	4	3	.	1	.
	G-11	.	1	3	1	2
	G-12	32	27	25	18	17
	G-13	3	5	5	4	3
	G-14	4	4	4	1	1
	G-15	.	1	1	1	1
*TOTAL ADMIXOFC NEW ORLN		58	56	50	34	32
NEW YORK	G-01	1	.	.	.	.
	G-03	.	1	.	1	.
	G-04	.	.	.	.	1
	G-05	14	6	3	3	1
	G-06	5	4	2	1	.
	G-07	12	16	13	12	12
	G-09	3	1	6	.	.
	G-11	4	4	.	3	1
	G-12	76	51	47	39	38
	G-13	13	30	28	20	21
	G-14	7	8	6	4	3
	G-15	2	2	2	3	3
*TOTAL ADMIXOFC NEW YORK		137	123	107	86	80
NEWARK	G-04	5	7	.	.	.
	G-05	9	5	4	2	1
	G-06	4	1	1	1	.
	G-07	1	6	6	3	2

REPORT: FYPASSN2 P.P. END: 09/27/1997 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
NEWARK	G-09	.	1	4	.	.
	G-11	8	3	3	3	.
	G-12	24	22	20	17	14
	G-13	2	11	10	7	5
	G-14	2	3	3	3	4
	G-15	2	2	2	.	.
*TOTAL ADMIXOFC NEWARK		57	61	53	36	26
OKLA CTY	G-05	5	4	3	2	1
	G-06	10	4	2	.	.
	G-07	2	9	10	5	5
	G-09	.	1	1	.	.
	G-11	3	.	1	.	.
	G-12	27	25	22	13	13
	G-13	3	10	9	5	6
	G-14	.	1	2	2	2
*TOTAL ADMIXOFC OKLA CTY		50	54	50	27	27
OMAHA	G-05	1	.	.	.	.
	G-06	3	.	.	.	.
	G-07	5	7	4	2	1
	G-09	1	.	.	.	.
	G-11	1	1	.	.	.
	G-12	17	15	8	5	5
	G-13	2	5	5	3	3
	G-14	3	3	3	2	2
*TOTAL ADMIXOFC OMAHA		33	31	20	12	11
ORLANDO	G-04	2	2	.	.	.
	G-05	1	1	1	.	.
	G-06	9	.	.	.	.

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
ORLANDO	G-07	.	10	7	.	.
	G-09	.	.	1	.	.
	G-11	11	.	.	.	.
	G-12	1	9	7	.	.
	G-13	2	2	3	.	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC ORLANDO		27	25	20	0	0
PHILA	G-02	.	.	.	2	.
	G-03	.	.	.	3	.
	G-04	2	.	.	.	4
	G-05	6	3	3	.	.
	G-06	16	5	5	3	1
	G-07	10	24	27	42	35
	G-09	.	3	3	14	9
	G-11	29	.	1	6	16
	G-12	33	55	50	100	105
	G-13	10	12	11	49	52
	G-14	3	4	2	9	9
	G-15	3	3	3	7	7
*TOTAL ADMIXOFC PHILA		112	109	105	235	238
PHOENIX	G-05	5	2	.	.	.
	G-06	8	5	.	.	.
	G-07	18	19	8	2	1
	G-09	2	2	5	1	.
	G-11	9	5	2	4	2
	G-12	43	43	33	14	16
	G-13	3	9	7	1	2
	G-14	2	2	2	1	1
*TOTAL ADMIXOFC PHOENIX		90	87	57	23	22

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PITTSBRG	G-04	1	1	1	1	.
	G-05	4	1	1	1	1
	G-06	3	2	2	.	.
	G-07	5	8	4	4	3
	G-09	1	3	2	2	2
	G-11	4	2	2	2	2
	G-12	24	22	20	12	11
	G-13	6	8	8	6	5
	G-14	1	2	2	1	1
*TOTAL ADMIXOFC PITTSBRG		49	49	42	29	25
PORTLAND	G-03	.	.	1	.	.
	G-04	2	1	.	1	.
	G-05	7	6	3	.	.
	G-06	.	3	1	1	.
	G-07	6	8	5	4	3
	G-09	4	3	1	1	.
	G-11	5	2	4	1	1
	G-12	16	22	17	11	12
	G-13	5	4	3	4	3
	G-14	1	2	2	1	.
	G-15	1	1	1	.	.
*TOTAL ADMIXOFC PORTLAND		47	52	38	24	19
PROVIDNC	G-04	.	2	1	.	.
	G-05	3	1	1	.	.
	G-06	1	.	.	.	.
	G-07	6	5	3	1	1
	G-09	.	2	.	.	.
	G-11	5	1	1	.	.
	G-12	8	11	11	9	7
	G-13	3	4	3	2	2
	G-14	2	3	1	.	.
*TOTAL ADMIXOFC PROVIDNC		28	29	21	12	10

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PRT RICO	G-04	2	1	.	.	.
	G-05	2	1	.	.	.
	G-06	6	1	1	1	.
	G-07	6	9	8	6	6
	G-09	.	1	2	1	1
	G-11	10	2	2	2	.
	G-12	10	18	13	8	9
	G-13	7	5	3	2	2
	G-14	.	2	2	1	1
*TOTAL ADMIXOFC PRT RICO		43	40	31	21	19
RENO	G-05	1	1	.	.	.
	G-06	1	.	.	.	.
	G-07	1	2	.	.	.
	G-12	7	5	4	.	.
	G-13	2	.	.	.	.
*TOTAL ADMIXOFC RENO		12	8	4	0	0
RICHMOND	G-04	4	1	.	.	.
	G-05	3	1	.	.	.
	G-06	10	2	2	.	.
	G-07	9	18	15	3	6
	G-09	2	3	1	1	.
	G-11	5	4	4	2	2
	G-12	34	33	34	12	14
	G-13	5	11	11	2	4
	G-14	3	3	3	2	1
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC RICHMOND		76	77	71	23	28
SACRMNTO	G-04	1	.	.	.	.

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSIN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
SACRMNTO	G-05	9	6	4	1	.
	G-06	5	3	1	.	.
	G-07	5	10	6	.	.
	G-09	2	2	2	.	.
	G-11	2	2	2	.	.
	G-12	16	17	14	1	.
	G-13	3	4	4	.	.
	G-14	2	2	.	.	.
*TOTAL ADMIXOFC SACRMNTO		45	46	33	2	0
SAN DIEG	G-05	3	5	1	.	.
	G-06	1	2	1	.	.
	G-07	1	1	2	.	.
	G-09	.	.	1	.	.
	G-11	4	2	.	.	.
	G-12	9	9	11	.	.
	G-13	2	1	1	.	.
	G-14	.	1	1	.	.
*TOTAL ADMIXOFC SAN DIEG		20	21	18	0	0
SAN FRAN	G-01	.	.	.	2	.
	G-02	.	.	.	1	.
	G-04	.	.	.	.	2
	G-05	10	11	4	2	1
	G-06	9	1	1	.	.
	G-07	7	13	10	8	8
	G-08	1	.	.	.	.
	G-09	3	2	3	4	1
	G-11	9	8	6	2	3
	G-12	39	38	33	39	37
	G-13	14	14	12	14	13
	G-14	4	5	5	3	3
	G-15	4	2	2	1	1
*TOTAL ADMIXOFC SAN FRAN		100	94	76	76	69

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
SEATTLE	G-02	1	1	1	2	2
	G-03	1	1	.	.	.
	G-04	5	4	3	.	.
	G-05	6	6	4	2	1
	G-06	7	2	3	.	.
	G-07	10	14	12	4	4
	G-08	1	.	1	1	1
	G-09	24	4	1	.	.
	G-11	14	29	23	1	.
	G-12	40	40	36	24	21
	G-13	6	10	7	6	4
	G-14	5	3	4	2	3
	G-15	1	2	2	.	.
*TOTAL ADMIXOFC SEATTLE		121	116	97	42	36
SHRVPORT	G-04	1	1	.	.	.
	G-05	.	1	.	.	.
	G-06	10	.	.	.	.
	G-07	.	7	8	.	.
	G-09	1	.	.	.	.
	G-11	7	.	.	.	.
	G-12	6	11	9	1	.
	G-13	1	2	2	.	.
	G-14	.	1	1	.	.
*TOTAL ADMIXOFC SHRVPORT		26	23	20	1	0
SIOUX FL	G-05	1	1	1	.	.
	G-06	3	.	.	.	.
	G-07	.	3	1	.	.
	G-12	2	1	1	.	.
	G-13	.	1	1	.	.
*TOTAL ADMIXOFC SIOUX FL		6	6	4	0	0

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
SLT LAKE	G-06	6	.	.	.	.
	G-07	4	9	7	.	.
	G-09	.	1	.	.	.
	G-11	.	.	1	.	.
	G-12	15	14	10	.	.
	G-13	2	1	2	.	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC SLT LAKE		28	26	21	0	0
SN ANTON	G-04	1	3	.	.	.
	G-05	13	12	10	5	4
	G-06	18	2	.	.	.
	G-07	5	20	20	6	9
	G-09	2	2	2	4	.
	G-11	2	2	1	1	5
	G-12	36	32	27	13	12
	G-13	3	6	7	4	5
	G-14	2	3	3	1	1
*TOTAL ADMIXOFC SN ANTON		82	82	70	34	36
SNTA ANA	G-01	.	.	.	1	.
	G-03	.	.	.	1	1
	G-04	.	.	.	.	1
	G-05	10	6	3	6	1
	G-06	10	4	.	3	2
	G-07	4	14	11	16	21
	G-09	2	1	4	9	2
	G-11	4	1	1	11	14
	G-12	19	21	19	69	79
	G-13	1	2	3	42	46
	G-14	1	1	1	10	9
	G-15	.	.	.	1	1
*TOTAL ADMIXOFC SNTA ANA		51	50	42	169	177

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
SPOKANE	G-05	1	.	.	.	.
	G-07	1	1	1	.	.
	G-12	4	4	2	.	.
*TOTAL ADMIXOFC SPOKANE		6	5	3	0	0
SPRNGFLD	G-11	1	.	.	.	.
ST LOUIS	G-01	.	.	.	1	.
	G-04	2	1	.	.	.
	G-05	4	3	1	1	.
	G-06	4	.	.	.	.
	G-07	7	11	6	3	3
	G-09	1	.	.	.	.
	G-11	1	2	.	1	.
	G-12	32	30	20	10	9
	G-13	6	6	4	2	3
	G-14	1	2	3	2	1
	G-15	2	2	1	.	.
*TOTAL ADMIXOFC ST LOUIS		60	57	35	20	16
TAMPA	G-04	.	2	.	.	.
	G-05	4	1	.	.	.
	G-06	6	.	.	.	.
	G-07	2	7	6	.	.
	G-11	1	1	.	.	.
	G-12	17	17	15	.	.
	G-13	3	3	3	2	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC TAMPA		34	32	25	2	0

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN HOUSI

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
TULSA	G-05	2	1	1	.	.
	G-06	11	1	.	.	.
	G-07	.	11	12	.	.
	G-12	20	14	13	.	.
	G-13	1	2	2	.	.
*TOTAL ADMIXOFC TULSA		34	29	28	0	0
TUSCON	G-05	1	.	.	.	.
	G-06	3	2	2	.	.
	G-07	2	2	2	.	.
	G-12	9	7	4	.	.
	G-13	1	.	1	.	.
	G-14	.	1	.	.	.
*TOTAL ADMIXOFC TUSCON		16	12	9	0	0
WASH DC	G-03	1	.	.	.	.
	G-04	2	1	.	.	.
	G-05	9	6	3	3	2
	G-06	11	10	2	.	.
	G-07	7	10	17	8	6
	G-09	2	3	1	3	1
	G-11	7	4	3	.	1
	G-12	37	37	35	19	19
	G-13	5	4	6	3	.
	G-14	.	2	2	.	1
	G-15	2	2	2	1	.
*TOTAL ADMIXOFC WASH DC		83	79	71	37	30
WILMNGTN	G-12	2	2	2	.	.
*TOTAL DPMTL_MLG HOUSING		5401	5172	4426	3522	3294

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN OMHAR

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
OMHAR	*SREX	.	.	.	.	1
	OTHER	.	.	.	.	36
*TOTAL ADMIXOFC OMHAR		0	0	0	0	37
*TOTAL DPMTL_MLG OMHAR		0	0	0	0	37

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN OMHAR

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
OMHAR	*SREX	.	.	.	.	1
	OTHER	.	.	.	.	36
*TOTAL ADMIXOFC OMHAR		0	0	0	0	37
*TOTAL DPMTL_MLG OMHAR		0	0	0	0	37

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PDR

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PDR	G-01	.	.	.	1	.
	G-02	.	.	.	.	1
	G-03	.	.	1	.	.
	G-06	1	1	1	1	1
	G-07	9	8	10	8	5
	G-08	4	4	4	4	5
	G-09	5	5	4	7	3
	G-10	2	2	2	1	1
	G-11	4	4	6	4	10
	G-12	8	6	7	7	7
	G-13	19	17	15	14	11
	G-14	31	32	33	33	36
	G-15	22	22	22	20	23
	*SRES	5	4	4	4	4
	*SREX	1	1	.	.	.
*TOTAL ADMIXOFC PDR		111	106	109	104	107
ATLANTA	G-13	.	.	.	.	3
	G-14	.	.	.	.	1
*TOTAL ADMIXOFC ATLANTA		0	0	0	0	4
BALTIMOR	G-14	.	.	.	.	1
BOSTON	G-12	.	.	.	.	1
BRMNGHAM	G-13	.	.	.	.	1
BUFFALO	G-13	.	.	.	.	1
CHICAGO	G-12	.	.	.	.	2

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PDR

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
CHICAGO	G-14	.	.	.	.	1
*TOTAL ADMIXOFC CHICAGO		0	0	0	0	3
COLUMBIA	G-13	.	.	.	.	1
COLUMBUS	G-12	.	.	.	.	2
	G-13	.	.	.	.	1
*TOTAL ADMIXOFC COLUMBUS		0	0	0	0	3
DENVER	G-13	.	.	.	.	1
	G-14	.	.	.	.	1
*TOTAL ADMIXOFC DENVER		0	0	0	0	2
DETROIT	G-13	.	.	.	.	1
FT WORTH	G-13	.	.	.	.	1
	G-14	.	.	.	.	1
*TOTAL ADMIXOFC FT WORTH		0	0	0	0	2
GREENSBR	G-13	.	.	.	.	1
JACKSNVL	G-12	.	.	.	.	2
	G-13	.	.	.	.	1
*TOTAL ADMIXOFC JACKSNVL		0	0	0	0	3

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PDR

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
KAN CITY	G-14	.	.	.	.	1
L. A.	G-13	.	.	.	.	1
MIN-STPL	G-12	.	.	.	.	1
	G-13	.	.	.	.	1
*TOTAL ADMIXOFC MIN-STPL		0	0	0	0	2
NEW ORLN	G-13	.	.	.	.	1
NEW YORK	G-15	.	.	.	.	1
NEWARK	G-13	.	.	.	.	1
OKLA CTY	G-13	.	.	.	.	1
OMAHA	G-13	.	.	.	.	1
PHILA	G-12	.	.	.	.	1
	G-14	.	.	.	.	1
*TOTAL ADMIXOFC PHILA		0	0	0	0	2
PITTSBRG	G-13	.	.	.	.	1
PORTLAND	G-13	.	.	.	.	1

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PDR

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PRT RICO	G-13	.	.	.	.	1
SAN FRAN	G-07	.	.	.	.	1
	G-12	.	.	.	.	1
	G-13	.	.	.	.	1
	G-14	.	.	.	.	1
*TOTAL ADMIXOFC SAN FRAN		0	0	0	0	4
SEATTLE	G-13	.	.	.	.	1
SN ANTON	G-13	.	.	.	.	1
ST LOUIS	G-13	.	.	.	.	1
WASH DC	G-13	.	.	.	.	1
*TOTAL DPMTL_MLG PDR		111	106	109	104	153

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PIH	G-02	.	.	1	2	.
	G-03	.	.	.	2	.
	G-04	5	4	2	3	4
	G-05	5	2	3	4	4
	G-06	8	3	4	4	5
	G-07	20	19	13	26	29
	G-08	4	6	8	7	5
	G-09	9	11	10	14	21
	G-10	5	7	9	8	8
	G-11	9	8	6	49	52
	G-12	26	18	12	85	95
	G-13	82	87	67	152	150
	G-14	49	48	41	60	69
	G-15	46	41	32	35	48
	*SRES	9	10	8	9	5
	*SREX	1	.	.	.	1
*TOTAL ADMIXOFC PIH		278	264	216	460	496
ALBQRQUE	G-01	.	.	.	1	1
	G-03	.	1	.	.	.
	G-05	1	2	.	.	.
	G-06	1	1	1	1	1
	G-12	4	3	2	1	2
	G-13	.	.	.	1	1
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC ALBQRQUE		7	8	4	4	5
ANCHRAGE	G-06	1	.	.	.	.
	G-07	4	4	4	3	3
	G-12	14	13	12	12	10
	G-13	.	1	3	3	3
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC ANCHRAGE		20	19	20	19	17

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
ATLANTA	G-03	.	.	.	1	1
	G-05	1	.	.	.	.
	G-06	.	1	.	.	.
	G-07	4	5	5	3	3
	G-09	1	.	.	.	.
	G-11	2	1	1	.	.
	G-12	27	29	26	13	10
	G-13	10	9	9	7	6
	G-14	2	2	3	2	1
	G-15	1	1	1	.	2
*TOTAL ADMIXOFC ATLANTA		48	48	45	26	23
BALTIMOR	G-04	1	.	.	.	.
	G-05	.	1	.	.	.
	G-06	.	.	1	1	.
	G-07	.	.	.	2	1
	G-09	1	.	.	.	.
	G-11	.	1	.	.	.
	G-12	7	8	8	13	12
	G-13	.	.	1	4	3
	G-14	1	1	1	2	3
	G-15	.	.	.	.	1
*TOTAL ADMIXOFC BALTIMOR		10	11	11	22	20
BOSTON	G-05	1	1	1	1	.
	G-06	1	1	1	1	1
	G-07	1	1	1	3	3
	G-09	.	.	.	1	.
	G-11	1	.	.	.	1
	G-12	20	19	16	20	20
	G-13	7	9	9	9	7
	G-14	1	1	.	2	4
	G-15	1	2	2	.	.
*TOTAL ADMIXOFC BOSTON		33	34	30	37	36

REPORT: FYPASSN2 P.P. END: 09/25/1999 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
BRMNGHAM	G-03	.	.	.	1	1
	G-06	.	.	.	1	1
	G-07	3	3	1	1	1
	G-09	.	.	1	.	.
	G-11	.	.	.	1	.
	G-12	11	12	10	8	10
	G-13	3	3	6	6	6
	G-14	1	2	3	1	1
	G-15	.	.	1	1	1
*TOTAL ADMIXOFC BRMNGHAM		18	20	22	20	21
BUFFALO	G-04	1	1	1	1	1
	G-06	3	1	1	.	.
	G-07	1	3	3	3	2
	G-12	20	20	17	11	8
	G-13	3	3	3	1	1
	G-14	1	1	1	1	.
	G-15	.	.	.	.	1
*TOTAL ADMIXOFC BUFFALO		29	29	26	17	13
CHARLSTN	G-06	1	.	.	.	.
	G-07	.	1	1	.	.
	G-12	5	5	4	.	.
	G-14	1	1	.	.	.
*TOTAL ADMIXOFC CHARLSTN		7	7	5	0	0
CHICAGO	G-01	.	.	.	1	.
	G-04	1	1	1	1	2
	G-05	1	.	.	.	.
	G-06	3	2	2	1	1
	G-07	4	8	8	9	9

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
CHICAGO	G-09	1	1	1	1	1
	G-11	4	2	.	1	.
	G-12	47	46	41	26	24
	G-13	18	20	18	14	14
	G-14	1	1	1	2	2
	G-15	2	4	3	2	1
*TOTAL ADMIXOFC CHICAGO		82	85	75	58	54
CLEVELND	G-01	.	.	.	.	1
	G-06	3	.	.	.	.
	G-07	1	2	2	2	2
	G-12	16	14	14	17	17
	G-13	2	3	3	3	3
	G-14	1	1	1	2	2
*TOTAL ADMIXOFC CLEVELND		23	20	20	24	25
CNCINATI	G-06	1	1	1	.	.
	G-12	6	6	4	2	.
*TOTAL ADMIXOFC CNCINATI		7	7	5	2	0
COLUMBIA	G-06	1	.	.	.	.
	G-07	1	2	1	1	1
	G-11	.	.	2	.	.
	G-12	9	9	8	5	3
	G-13	1	1	1	1	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC COLUMBIA		13	13	13	8	5

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
COLUMBUS	G-01	.	.	.	1	.
	G-03	.	.	.	1	1
	G-04	1	1	1	.	.
	G-05	.	1	.	.	.
	G-06	1	1	1	.	.
	G-12	6	5	5	2	2
	G-13	1	1	1	1	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC COLUMBUS		10	10	9	6	4
CORAL GB	G-05	.	.	.	1	.
	G-06	.	.	.	1	.
	G-07	.	.	1	.	1
	G-08	.	.	.	1	1
	G-11	.	.	1	.	.
	G-12	.	.	2	6	6
	G-13	.	.	4	7	7
	G-14	.	.	1	2	2
	G-15	.	.	.	1	1
*TOTAL ADMIXOFC CORAL GB		0	0	9	19	18
DENVER	G-06	2	1	1	.	.
	G-07	5	6	7	7	8
	G-08	.	.	1	.	.
	G-09	.	.	2	2	1
	G-10	.	.	.	.	1
	G-11	4	.	.	.	.
	G-12	39	41	35	26	25
	G-13	6	7	23	23	23
	G-14	1	.	3	3	8
	G-15	2	2	8	7	8
	*SRES	.	.	.	1	1
*TOTAL ADMIXOFC DENVER		59	57	80	69	75

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
DES MOIN	G-05	1	1	1	.	.
	G-07	1	.	.	.	.
	G-09	.	1	.	.	.
	G-11	.	.	1	.	.
	G-12	8	7	6	1	.
	G-14	1	.	1	.	.
*TOTAL ADMIXOFC DES MOIN		11	9	9	1	0
DETROIT	G-04	.	.	.	.	1
	G-05	1	1	.	.	.
	G-06	3	1	.	.	.
	G-07	.	2	1	1	1
	G-12	12	12	8	8	7
	G-13	1	2	4	3	3
	G-14	1	.	.	.	.
	G-15	.	1	1	1	1
*TOTAL ADMIXOFC DETROIT		18	19	14	13	13
FT WORTH	G-01	.	.	.	1	.
	G-02	.	.	.	.	1
	G-04	5	.	.	.	.
	G-05	2	.	.	.	1
	G-06	3	2	.	.	.
	G-07	3	2	4	3	3
	G-09	.	3	1	2	.
	G-11	2	3	4	.	.
	G-12	22	20	22	14	18
	G-13	8	8	13	4	3
	G-14	.	.	1	2	1
	G-15	1	1	.	.	2
*TOTAL ADMIXOFC FT WORTH		46	39	45	26	29

REPORT: FYPASSN2 P.P. END: 09/27/1997 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
GREENSBR	G-05	.	.	1	.	.
	G-06	3	.	.	.	.
	G-07	.	3	4	4	4
	G-09	2	1	.	.	.
	G-11	.	1	2	.	.
	G-12	10	11	9	19	16
	G-13	4	4	3	4	4
	G-14	1	.	.	1	2
	G-15	.	1	1	1	1
*TOTAL ADMIXOFC GREENSBR		20	21	20	29	27
GRND RPD	G-05	1	1	2	.	.
	G-06	1	.	.	.	.
	G-11	1	.	.	.	.
	G-12	8	4	2	.	.
	G-13	.	1	1	.	.
*TOTAL ADMIXOFC GRND RPD		11	6	5	0	0
HARTFORD	G-03	1	1	.	.	.
	G-04	.	.	1	.	.
	G-05	1	.	.	1	.
	G-06	.	.	.	.	1
	G-07	1	1	1	.	.
	G-09	.	1	1	.	.
	G-11	.	.	.	1	.
	G-12	10	9	3	2	2
	G-13	1	1	5	2	2
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC HARTFORD		15	14	12	7	6
HONOLULU	G-12	1	.	.	.	.

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
HONOLULU	G-13	.	1	1	.	.
*TOTAL ADMIXOFC HONOLULU		1	1	1	0	0
HOUSTON	G-06	1	.	.	.	.
	G-07	.	1	1	1	1
	G-12	7	7	6	9	7
	G-13	.	.	1	.	.
	G-14	1	1	.	1	1
*TOTAL ADMIXOFC HOUSTON		9	9	8	11	9
INDNAPLS	G-06	1	.	.	.	.
	G-07	.	1	1	1	1
	G-09	2	.	.	.	.
	G-11	.	2	.	.	.
	G-12	6	5	4	4	3
	G-13	3	2	3	2	1
	G-14	2	2	2	2	2
*TOTAL ADMIXOFC INDNAPLS		14	12	10	9	7
JACKSNVL	G-06	4	.	.	.	.
	G-07	1	3	3	1	.
	G-09	.	1	1	.	.
	G-11	3	2	1	.	.
	G-12	12	13	13	9	7
	G-13	2	3	2	1	.
	G-14	1	2	2	1	1
	G-15	.	.	.	.	1
*TOTAL ADMIXOFC JACKSNVL		23	24	22	12	9

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
JACKSON	G-05	1	.	.	.	.
	G-06	.	1	1	1	1
	G-12	10	9	8	8	8
	G-13	.	1	1	.	.
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC JACKSON		12	12	11	10	10
KAN CITY	G-05	1	1	1	1	.
	G-06	4	1	1	1	1
	G-07	3	4	4	2	2
	G-09	1	2	.	.	.
	G-11	3	1	2	.	.
	G-12	20	22	18	14	13
	G-13	5	7	9	4	4
	G-14	1	1	1	2	2
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC KAN CITY		39	40	37	25	23
KNOXVLLE	G-01	.	.	.	1	.
	G-03	.	.	.	.	1
	G-11	.	.	.	1	1
	G-12	7	5	4	5	2
	G-14	1	1	1	1	.
*TOTAL ADMIXOFC KNOXVLLE		8	6	5	8	4
L. A.	G-03	.	.	.	.	1
	G-05	1	.	.	.	.
	G-07	2	2	1	.	.
	G-08	.	1	1	1	1
	G-09	2	.	.	.	.
	G-11	2	2	.	.	1

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
L. A.	G-12	13	12	12	6	5
	G-13	3	3	3	2	2
	G-14	1	1	1	1	.
	G-15	.	.	.	.	1
*TOTAL ADMIXOFC L. A.		24	21	18	10	11
LOUISVL	G-03	.	.	.	.	1
	G-07	2	2	2	2	2
	G-09	1	.	.	.	.
	G-11	1	1	.	.	.
	G-12	13	14	13	12	12
	G-13	4	4	4	5	5
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC LOUISVL		22	22	20	20	21
LTL ROCK	G-05	1	.	.	.	.
	G-06	1	1	1	.	.
	G-07	.	1	2	1	1
	G-12	11	11	9	7	7
	G-13	2	1	.	.	.
	G-14	.	1	1	1	1
*TOTAL ADMIXOFC LTL ROCK		15	15	13	9	9
MANCHSTR	G-07	1	.	.	.	.
	G-09	.	1	.	.	.
	G-11	.	.	1	.	.
	G-12	4	4	3	1	.
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC MANCHSTR		6	6	5	1	0

REPORT: FYPASSN2 P.P. END: 09/27/1997 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
MIN-STPL	G-04	1	1	1	.	.
	G-05	.	.	.	1	1
	G-06	1	.	.	.	.
	G-07	1	2	2	1	1
	G-12	17	17	17	9	5
	G-13	1	1	1	1	1
	G-14	1	1	1	1	.
*TOTAL ADMIXOFC MIN-STPL		22	22	22	13	8
MLWAUKEE	G-02	1	1	1	1	1
	G-04	1	1	1	1	1
	G-05	1	1	1	.	1
	G-06	2	.	.	.	.
	G-07	.	2	2	2	2
	G-12	11	9	7	3	3
	G-13	2	3	3	2	2
	G-14	1	1	1	.	1
*TOTAL ADMIXOFC MLWAUKEE		19	18	16	9	11
NASHVLLE	G-05	1	.	.	.	.
	G-07	1	1	.	.	.
	G-09	1	.	1	.	.
	G-11	1	1	.	1	1
	G-12	8	9	8	4	3
	G-13	.	.	1	1	1
	G-14	1	1	1	.	.
*TOTAL ADMIXOFC NASHVLLE		13	12	11	6	5
NEW ORLN	G-05	.	1	.	.	.
	G-06	1	1	.	.	.
	G-07	.	1	1	1	1

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
NEW ORLN	G-12	13	13	12	9	9
	G-13	3	4	7	5	4
	G-14	1	1	2	1	2
	G-15	.	1	.	1	1
*TOTAL ADMIXOFC NEW ORLN		18	22	22	17	17
NEW YORK	G-04	1	.	.	.	.
	G-05	2	.	.	.	.
	G-06	5	.	1	.	.
	G-07	3	5	3	4	3
	G-09	2	3	3	.	1
	G-11	2	2	2	3	1
	G-12	25	27	25	20	20
	G-13	12	13	13	11	9
	G-14	3	3	2	1	1
	G-15	1	2	2	1	1
*TOTAL ADMIXOFC NEW YORK		56	55	51	40	36
NEWARK	G-01	.	.	.	1	.
	G-02	.	.	.	.	1
	G-05	1	1	1	2	1
	G-06	2	2	1	.	.
	G-07	.	.	1	1	1
	G-09	1	.	.	.	.
	G-11	.	1	.	1	1
	G-12	24	20	19	17	21
	G-13	4	3	3	1	1
	G-14	2	2	2	1	2
	G-15	.	.	.	2	1
*TOTAL ADMIXOFC NEWARK		34	29	27	26	29

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
OKLA CTY	G-05	1	3	1	.	.
	G-06	1	3	1	1	1
	G-07	2	4	7	6	6
	G-09	.	.	.	1	.
	G-11	.	.	.	.	1
	G-12	20	27	24	22	19
	G-13	3	4	4	2	2
	G-14	1	.	.	.	.
	G-15	1	2	2	2	2
*TOTAL ADMIXOFC OKLA CTY		29	43	39	34	31
OMAHA	G-01	.	.	.	1	.
	G-06	1	.	.	.	.
	G-07	1	1	1	.	.
	G-09	.	1	.	.	.
	G-11	.	.	1	.	.
	G-12	5	4	4	4	4
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC OMAHA		8	7	7	6	5
PHILA	G-01	.	.	.	1	.
	G-04	1	1	1	.	1
	G-05	1	1	.	.	.
	G-06	3	2	.	.	.
	G-07	4	5	3	1	2
	G-09	1	1	1	1	1
	G-12	18	16	15	10	9
	G-13	7	7	6	4	4
	G-14	1	1	.	.	.
	G-15	1	.	1	1	1
*TOTAL ADMIXOFC PHILA		37	34	27	18	18

REPORT: FYPASSN2 P.P. END: 09/30/1995 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PHOENIX	G-04	4	2	1	1	.
	G-05	.	1	1	.	.
	G-06	4	.	.	.	.
	G-07	5	10	6	6	5
	G-09	1	1	.	.	.
	G-12	28	27	23	17	17
	G-13	6	4	5	6	5
	G-14	4	4	2	2	1
	G-15	1	1	1	1	1
*TOTAL ADMIXOFC PHOENIX		53	50	39	33	29
PITTSBRG	G-03	.	.	.	1	.
	G-06	1	1	.	.	.
	G-07	.	.	1	1	1
	G-09	.	.	.	1	.
	G-11	1	.	.	.	.
	G-12	7	8	9	10	7
	G-13	2	2	2	2	2
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC PITTSBRG		12	12	13	16	11
PORTLAND	G-06	1	1	.	.	.
	G-07	1	1	2	2	2
	G-11	1	1	.	.	.
	G-12	7	6	4	3	3
	G-13	1	1	2	2	1
*TOTAL ADMIXOFC PORTLAND		11	10	8	7	6
PROVIDNC	G-06	1	.	.	.	.
	G-07	.	1	1	.	.
	G-12	4	3	3	1	.

REPORT: FYPASSN2 P.P. END: 09/28/1996 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
PROVIDNC	G-13	1	1	1	.	.
*TOTAL ADMIXOFC PROVIDNC		6	5	5	1	0
PRT RICO	G-04	.	.	.	1	.
	G-06	3	3	.	.	.
	G-07	1	1	3	3	3
	G-12	11	11	9	6	8
	G-13	2	2	2	3	3
	G-14	1	1	.	.	.
	G-15	.	.	1	1	1
*TOTAL ADMIXOFC PRT RICO		18	18	15	14	15
RICHMOND	G-03	.	.	.	.	1
	G-06	2	.	.	.	.
	G-07	.	2	2	2	1
	G-11	1	1	.	.	.
	G-12	6	5	4	3	3
	G-14	1	1	1	2	1
*TOTAL ADMIXOFC RICHMOND		10	9	7	7	6
SACRMNTO	G-01	.	.	.	1	.
	G-03	.	.	.	.	1
	G-07	.	.	.	1	.
	G-09	1	.	.	.	.
	G-11	.	1	.	.	.
	G-12	4	3	4	3	.
	G-14	1	1	1	1	.
*TOTAL ADMIXOFC SACRMNTO		6	5	5	6	1

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
SAN FRAN	G-01	.	.	.	1	.
	G-03	.	.	.	.	1
	G-05	.	1	.	.	.
	G-06	2	.	.	.	.
	G-07	6	3	4	2	3
	G-09	.	4	1	1	.
	G-11	1	.	3	1	1
	G-12	16	15	12	10	14
	G-13	6	6	6	4	1
	G-14	.	.	1	2	3
	G-15	1	1	1	.	1
*TOTAL ADMIXOFC SAN FRAN		32	30	28	21	24
SEATTLE	G-05	.	1	1	1	1
	G-06	1	.	.	.	.
	G-07	5	6	5	4	4
	G-11	1	.	.	.	.
	G-12	22	17	19	19	18
	G-13	9	12	9	8	8
	G-14	.	1	1	.	1
	G-15	2	2	1	1	2
*TOTAL ADMIXOFC SEATTLE		40	39	36	33	34
SN ANTON	G-05	3	2	2	1	2
	G-06	3	2	2	2	2
	G-07	3	2	2	2	2
	G-09	1	1	.	.	.
	G-11	.	2	2	.	.
	G-12	12	12	11	8	8
	G-13	2	2	2	.	.
	G-14	1	1	1	1	.
	G-15	.	.	.	.	1
*TOTAL ADMIXOFC SN ANTON		25	24	22	14	15

REPORT: FYPASSN2 P.P. END: 09/26/1998 RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SALARY AND EXPENSES SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN PIH

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
ST LOUIS	G-04	1	1	1	1	.
	G-07	2	.	.	.	.
	G-09	.	2	.	.	.
	G-11	.	.	2	.	.
	G-12	7	6	5	4	4
	G-13	1	1	1	.	.
	G-14	.	.	.	1	1
*TOTAL ADMIXOFC ST LOUIS		11	10	9	6	5
WASH DC	G-01	.	.	.	1	.
	G-03	.	.	.	.	1
	G-04	1	1	1	1	.
	G-07	.	1	1	.	1
	G-09	1	.	.	.	.
	G-11	.	1	.	.	.
	G-12	5	5	5	.	.
	G-13	1	1	4	3	2
	G-14	1	1	1	1	1
*TOTAL ADMIXOFC WASH DC		9	10	12	6	5
*TOTAL DPMTL_MLG PIH		1407	1372	1266	1315	1301

REPORT: FYPASSN2 P.P. END: RUN DATE: 06/26/00 PART-3
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
SUMMARY BY GRADE LEVEL BY FISCAL YEAR IN

OFFICE	GRADE GROUP	*FY* 1995	1996	1997	1998	1999
TOTAL		10966	10479	9475	9034	9162

MCKINNEY HOMELESS ASSISTANCE PROGRAMS

Question. Mr. Secretary, there are a lot of issues that we need to look at in the McKinney Homeless Assistance programs over the next few months. I have serious concerns over how well continuums of care work as well as concerns about HUD's oversight of the homeless assistance programs. A number of homeless assistance programs also face serious funding problems.

As you know, HUD funds local McKinney Homeless Assistance programs through a block grant funding formula allocation that is not authorized under the Supportive Housing program or the Shelter Plus Care program. This approach depends on local convenors to identify local homeless priorities through a continuum of care but the funding formula itself uses no indicators of need that are associated with homeless issues and concerns. How does HUD justify this approach outside the argument that the formula is already used for Emergency Shelter Block Grant program?

Answer. HUD does not fund McKinney Homeless Assistance programs through a block grant formula, but rather a competition which uses the Emergency Shelter

Grant formula as the basis for determining relative need to ensure a more equitable distribution of dollars to those communities which successfully compete for funding. The actual determination of who receives funding is based on various selection criteria mandated by Congress, including: capacity of the applicant, the extent of supplemental resources provided by the applicant, the cost-effectiveness of the project, the extent to which the applicant has demonstrated coordination with other entities, and the need for the project.

You raised a concern that the formula used to assign need uses no indicators associated with homelessness. There is no precise measure of homeless need because homeless persons are difficult to regularly enumerate. As such, HUD looked to Congress for direction on how best to reflect need in selecting projects. The McKinney Act requires that the allocation of Emergency Shelter Grant Program (ESG) funds shall be made using the Community Development Block Grant (CDBG) formula factors. The factors are population, poverty, housing overcrowding, growth lag, and age of housing. Given that Congress directed HUD to use these factors in allocating ESG funds for homeless persons, the Department chose to follow this lead and use these same factors in assigning need for the HUD's competitive McKinney programs.

Question. What oversight procedures does HUD have in place to ensure that the continuum of care approach provides appropriate decisionmaking?

Answer. Several components of the continuum of care process facilitate appropriate decision making at the community level. First, each community must include, in their funding application, a list of the names and types of organizations that were part of their planning process. This list includes the populations served by each organization and the level of participation of each entity. Second, communities must provide a description of the process and rationale used for establishing the community's priorities. Finally, a description must be included that shows how the project selection process was fair and gave equal consideration to projects proposed by nonprofit organizations. These components are evaluated, as part of HUD's review of applications, and communities that do not address these components may not receive funding.

Question. What oversight procedures does HUD have in place to ensure that funds are being used appropriately?

Answer. The Department does a number of things to ensure that funds are being used appropriately. First, grantees receive funds through an automated voice response letter of credit system. The system contains checks and balances so that payments are made only after certain requirements are satisfied. Each grantee must submit an Annual Performance Report (APR) to HUD. If the APR is not submitted after 110 days, the letter of credit system is edited so that grantees may not draw down funds. The APR is reviewed at the field office and Headquarters levels.

Both on and off-site monitoring is a critical part of grant oversight. Field office staff perform the monitoring, using written standards and procedures. Results of monitoring are issued in writing to the grantee, and the monitoring process includes follow-up.

Expert technical assistance is available to grantees that may be having specific problems in implementing their projects. The Department oversees the provision of technical assistance by subcontractors.

Grantees applying for renewal funding must meet threshold eligibility and capacity standards. Monitoring results, audits, general oversight and other information are taken into account in determining whether a renewal grantee meets these threshold standards.

Question. Please identify for each of fiscal years 1998, 1999 and 2000 all HUD staff (by name, title and responsibility) that are responsible for the oversight of McKinney Homeless Assistance funds in each HUD region and at headquarters.

Answer. The following is the listing of Headquarters employees and the geographic areas for which they are responsible in administering HUD's homeless assistance programs.

Attached is "Report 1" which details the staffing for each CPD Field Office with responsibility for McKinney Homeless Assistance programs. There are 233 CPD staff in Field Offices working on homeless assistance programs. Their titles are provided. However, it is important to note that CPD Field Office staff are generalists. CPD staffers that work on McKinney Act programs also have numerous other responsibilities. While CPD Field Office staff are not dedicated solely to McKinney Homeless Assistance programs, each of the persons listed below has considerable experience in these programs and maintains personal responsibility for various grants.

SNAPs HEADQUARTERS STAFF AND RESPONSIBILITIES

Region/State	Current (fiscal year 2000)	Fiscal years—	
		1999	1998
New England:			
MA	Robin Raysor	Robin Raysor	Robin Raysor.
RI	Betty Nola	Betty Nola	Betty Nola.
ME	Gloria Montgomery	Robin Raysor	Robin Raysor.
VT	Gloria Montgomery	Robin Raysor	Robin Raysor.
NH	Gloria Montgomery	Robin Raysor	Robin Raysor.
CT	Marian Jones	Marian Jones	Marian Jones.
New York, New Jersey:			
Buffalo, NY	Marian Jones	Marian Jones	Marian Jones.
NYC	Allison Manning	Michelle Smith	Michelle Smith.
NJ	Tonya Johnson	Tonya Johnson	Susana Limon.
Mid-Atlantic.			
Washington, DC	Robin Raysor	Robin Raysor	Robin Raysor.
Alexandria; Arlington, Fairfax, Prince George's, Montgomery, Loudoun, Prince William Counties, Southern VA.	Tonya Johnson Robin Raysor	Tonya Johnson Robin Raysor	Susana Limon. Robin Raysor. Mary Douglas.
MD	Alma Thomas	Alma Thomas	Alma Thomas.
PA, DE, WV	Rebecca Wiley	Rebecca Wiley	Rebecca Wiley.
Southeast:			
MS	Vanessa Barnard	Vanessa Barnard	Alma Thomas.
SC	Vanessa Barnard	Vanessa Barnard	Alma Thomas.
FL	Alma Thomas	Alma Thomas	Alma Thomas.
NC	Kathy Burruss	Kathy Burruss	Kathy Burruss.
AL	Kathy Burruss	Kathy Burruss	Kathy Burruss.
GA	Kathy Burruss	Kathy Burruss	Kathy Burruss.
KY	Gloria Montgomery	G. Montgomery	G. Montgomery.
TN	Gloria Montgomery	G. Montgomery	G. Montgomery.
Caribbean: Puerto Rico, VI	Susana Limon	Susana Limon	Michelle Smith.
Midwest:			
IL	Mike Roanhouse	Mike Roanhouse	Mike Roanhouse.
IN	Susana Limon	Susana Limon	Susana Limon.
OH	Delores Randall	Delores Randall	Delores Randall.
MI	Elaine Braverman	Elaine Braverman	Mike Roanhouse.
WI	Mike Roanhouse	Mike Roanhouse	Mike Roanhouse.
MN	Larry Blume	Larry Blume	Alexa Mitrakos.
Southwest:			
Southern TX (San Antonio)	Vanessa Barnard	Mary Douglas	Mary Douglas.
Northern TX (Fort Worth)	Susana Limon	Mary Douglas	Mary Douglas.
OK	Susana Limon	Mary Douglas	Marv Douglas.
NM	Susana Limon	Mary Douglas	Mary Douglas.
AR	Delores Randall	Betty Nola	Betty Nola.
LA	Elaine Braverman	Betty Nola	Betty Nola.
Great Plains:			
KS	Marian Jones	Marian Jones	Marian Jones.
NE	Marian Jones	Marian Jones	Marian Jones.
IA	Marian Jones	Marian Jones	Marian Jones.
MO	Elaine Braverman	Elaine Braverman	Marian Jones.
Rocky Mountain:			
Denver, CO	Polly Cooper	Polly Cooper	Polly Cooper.
CO	Polly Cooper	Alexa Mitrakos	Alexa Mitrakos.
MT	Polly Cooper	Alexa Mitrakos	Alexa Mitrakos.
ND, SD	Polly Cooper	Alexa Mitrakos	Alexa Mitrakos.
UT, WY	Polly Cooper	Alexa Mitrakos	Alexa Mitrakos.
Pacific, Hawaii:			
Northern CA, HI	Allison Manning	Allison Manning	Allison Manning.
Southern CA	Beverly Moore	Beverly Moore	Beverly Moore.
AZ, NV	Susana Limon	Susana Limon	Susana Limon.
Northwest, Alaska:			
WA, AK	Larry Blume	Larry Blume	Larry Blume.
OR, ID	Mildred Bush	Mildred Bush	Mildred Bush.

REPORT 1.—MCKINNEY HOMELESS ASSISTANCE INFORMATION FOR SENATE REQUEST

Field Office	Continuum of Care Staff	Number Fiscal Year 1998 Monitoring
Alabama	Beverly Gosnell, Public Trust Officer	Huntsville/Madison County.
	Ed Coberly, Public Trust Officer	New Futures.
	Charles Franklin, Public Trust Officer	City of Huntsville.
	June Franklin, Public Trust Officer	
	Steve Hand, Public Trust Officer	
	Dale Richards, Public Trust Officer	
	David Roarke, Public Trust Officer	
Alaska	Andrew Smith, Senior CPD Rep	None.
	Kim Davis, CPD Rep	
Arkansas	Anne Golnik, Director	None.
	Charles Blevins, Senior CPD Rep	
	Danny Carter, Senior CPD Rep	
	Freida Nunez, CPD Rep	
	Rhonda Shannon, CPD Rep	
Buffalo	James Bates, CPD Rep	None.
	Tom Perl, CPD Rep	
	Barbara Barksdale, CPD Rep	
	Gary Kerr, Financial Analyst	
	Ken Naples, Financial Analyst	
	Linda Moore, CPD Rep	
	Robert Guadagno, CPD Rep	
	Cheryl Sullivan, CPD Rep	
	Nancy A. Peacock	
	Alex Vilardo, CPD Rep	
	Nancy Lesakowski, CPD Rep	
	Rosemarie Canestro, CPD Rep	
	Eilene Krasselt, CPD Rep	
	Peggy Meinl, CPD Rep	
	Jan Galena, CPD Rep	
California	Millie D. Dusha, Senior CPD Rep	
	Mary Bandiera, CPD Rep	Center for Employment Training.
	Rafael Cedillos, Senior CPD Rep	Emergency Housing Consortium.
	Maria Cremer, Program Manager	Phoenix Programs, Inc.
	Michael Dawe, CPD Rep	Resources for Community Development.
	John Enos, CPD Rep	Transitional Living and Community Support.
	Lou Kislin, Senior CPD Rep	
	Evelyn Lam, Financial Analyst	
	Dan Louie, Financial Analyst	
	Marty Mitchell, Program Manager	
	Winston Moy, CPD Rep	
	Lorraine Perez, Financial Analyst	
	Sandy Peters, Senior CPD Rep	
	Jimmy Prater, Deputy Director	
	Lillian Pyne, CPD Rep	
	Ron Pagusa, Financial Analyst	
	Steven B. Sachs, Director	
	Yvonne Swift, Senior CPD Rep	
	Cathy Thrash, CPD Rep	
	Angelo Tom, Program Support Director	
	Larry Wuerstle, Senior CPD Rep	
Caribbean	Michele K. Smith, Senior CPD Rep	None.
	Elinson Acosta, Senior CPD Rep	
	Frances Arroyo, Senior CPD Rep	
	Maria Guzman, Senior CPD Rep	
	Jose R. Rivera, Program Manager	
	Carmen R. Cabrera, Director	

REPORT 1.—MCKINNEY HOMELESS ASSISTANCE INFORMATION FOR SENATE REQUEST—Continued

Field Office	Continuum of Care Staff	Number Fiscal Year 1998 Monitoring
Colorado	Edward Atencio, CPD Rep	None.
	Karen Clark, CPD Rep	
	Ramona Elizalde, CPD Rep	
	Susan Hermanson, CPD Rep	
	Dave Jacops, CPD Rep	
	Jade Santoro, CPD Rep	
	Loretta Tinkum, CPD Rep	
	Mary Ann Geissel, CPD Rep	
	Lyle Konkol, CPD Rep	
	Judy Padgett, CPD Rep	
	Jade Santoro, Program Manager	
	Charles Kreiman, Program Manager	
Connecticut	Mary Ellen Morgan, CPD Director	None.
	Caroline Carlson, Program Manager	
	John Carella, CPD Rep	
	Gary Reisine, CPD Rep	
	Peter Blomstrom, CPD Rep	
	Karen Davis, CPD Rep	
Florida	Ann Chavis, Program Manager	None.
	Rafael Portuondo, CPD Rep	
	Jack D. Johnson, Director	
Georgia	John Perry, CPD Director	Cobb Family Resources, Inc.
	Russell Douglas, Program Manager	Metro Atlanta Task: Southside Healthcare.
	Earl Mecham, CPD Rep	Metro Atlanta Task: Housing Initiatives.
	Alma Cooper, CPD Rep	Alternate Life Paths Program, Inc.
	Mary Presley, Senior CPD Rep	Our Common Welfare, Inc.
	Stella Taylor, CPD Rep	Metro Atlanta Task: Fulton Atlanta Comm.
	Hak-Keun Chang, CPD Rep	Calvary Refuge, Inc.
	Charles Greenfield, CPD Rep	House of TIME.
Hawaii	Mark A.Chandler, Senior CPD Rep	None.
	Richard L. Knight, CPD Rep	
	Marsha E. Ito, CPD Rep	
	Robert Zurowski, CPD Rep	
Illinois	Ray Willis, Program Manager	South Side Office of Concern.
	Perry Vietti, Program Manager	Human Service Center.
	Darlene O'Keefe, CPD Rep	City of Urbana.
	Ray Canchola, CPD Rep	CEFS.
	Valton Nunn, CPD Rep	
	Roger McMurray, CPD Rep	
	Wivina Stremel, CPD Rep	
	Winston McGill, CPD Rep	
	Darrel Bugajsky, CPD Rep	
	Belinda Twitty, CPD Rep	
	City of Rockford (SHP).	
	City of Rockford (SPC).	
	Community Mental Health.	
	Peoria YMCA.	
	Crittenton Care.	
	Julian House.	
Indiana	Robert F. Pofenberger, CPD Director	City of Gary/The Ark.

REPORT 1.—MCKINNEY HOMELESS ASSISTANCE INFORMATION FOR SENATE REQUEST—Continued

Field Office	Continuum of Care Staff	Number Fiscal Year 1998 Monitoring
	Dolores Koziol, Program Manager	
	Jeanne Meggs, Program Manager	
	John Dorgan, Senior CPD Rep	
	Karen Bishop, Financial Analyst	
	Brent Isaacs, CPD Rep	
	Patrick Phillips, CPD Rep	
Jacksonville	James N. Nichol, Director	None.
	Linda Dresdner, Public Trust Officer	
	Duane Gilliland, Public Trust Officer	
	Sybil Grissett, Public Trust Officer	
	Lance Folsom, Public Trust Officer	
	Phil Tallon, Public Trust Officer	
	Kathy White, Public Trust Officer	
	Sandra Huey, Public Trust Officer	
	Larry Gordon, Program Manager	
	Gary Cuasey, Program Manager	
	Marion Guilford, Public Trust Officer	
	Susan McGeHee, Public Trust Officer	
	Lugia Milanese, Public Trust Officer	
	Dan Shargas, Public Trust Officer	
	Linda Shively, Public Trust Officer	
	Debra Dye, Public Trust Officer	
	Elizabeth Dixon, Public Trust Officer	
Kansas	William Boyd, Director	None.
	Tom Corwin, Financial Analyst	
Kentucky	Ben A. Cook, Director	Commonwealth of KY (KY Housing Corp.).
	Barbara Cottrell, Senior CPD Rep	
	Carol C. Beeler, CPD Rep	
	Louise D. Thompson, CPD Rep	
Los Angeles	William K. Barth, Director	None.
	Sara Hunley, Senior CPD Rep	
	Jana Bickel, Senior CPD Rep	
	Juanita Villalobos, Public Trust	
	Harold Butler, CPD Rep	
	Sandra Taylor, CPD Rep	
	Wayne Itoga, Act., Program Manager	
	Faye Barnes, CPD Rep	
	Salim Rahemtulla, CPD Rep	
	Chin Woo Choi, Program Manager	
	Jean Prohoroff, CPD Rep	
	Joseph Lisante, CPD Rep	
	John Cook, Senior CPD Rep	
Louisiana	Gregory J. Hamilton, Director	None.
Maryland	Joseph O'Connor, Director	None.
	Ann Schenning, CPD Rep	
	Bob Cummings, CPD Rep	
Massachusetts	Richard L. Hatin, Program Manager	None.
	Katherine Baumgardner, CPD Rep	
	Nicholas Kallan, Financial Analyst	
	James Joyce, Rehab. Mgmt. Spec	
	Mary Ann Martel, CPD Rep	
	Edwin Gleba, Reloc. Acq. Spec	
	Darlene Xintras, Program Support Spec	
Michigan	R. Perry, Director	None.
	M. Sykes, CPD Rep	
	K. Kiihr, CPD Rep	
	C. Patrick, CPD Rep	
	G. Carter, CPD Rep	
	J. Roney, CPD Rep	

REPORT 1.—MCKINNEY HOMELESS ASSISTANCE INFORMATION FOR SENATE REQUEST—Continued

Field Office	Continuum of Care Staff	Number Fiscal Year 1998 Monitoring
Minnesota	Thomas Koon, Program Manager	Gardner, Martin Hotel.
	Doug Olson, CPD Rep	Mary Hall.
	Dennis Williams, CPD Rep	YWCA.
	Mary Burbank, CPD Rep	The Heritage.
	John Swanson, Program Manager	Human Dvlpt. Ct. and Range Mental Hlth.
	Cindy Behnke, Senior CPD Rep	Churches United in Ministry.
	Maria Paulson, Senior CPD Rep	Life Housing Harbor House.
	Ruth Drolsum, CPD Rep	St. Louis County.
	Gerald Patiuk, CPD Rep	Range Transitional Housing.
		American Indian Housing Organization.
		Women's Transitional Housing of Duluth.
		Arrowhead Economic Opportunity Agency.
		Violence Intervention Project.
Mississippi	Donna Keshel, CPD Rep	None.
	Linda F. Tynes, Senior CPD Rep	
Nebraska	Greg A. Bevirt, Director	None.
New Jersey	Kathleen A. Naymola, Director	
	Richard Kotuski, Program Manager	Bayonne.
	Nelson Diamond, CPD Rep	Newark.
	Elizabeth Williams, CPD Rep	
	Pa-Kota Cobb, Program Assistant	
New Mexico	Thomas Walker, Program Manager	Town of Taos Community Against Violence.
		St. Elizabeth's Shelter.
		Mesilla Valley Homeless Shelter.
		Albuquerque Health Care for the Homeless.
		Catholic Social Services.
New York City	Kathy J. Mullins, Director	
	Michael Litvin, CPD Rep	Westchester County.
	Bob Biegen, CPD Rep	Mount Vernon.
	Lois De Poalo, CPD Rep	Rockland County.
	Seth Margolies, CPD Rep	Yonkers.
	Melissa Lockley, CPD Rep	Islip.
	Kevin Crean, Program Manager	Nassua County.
	Stefanie Chait, CPD Rep	Suffolk County.
	Vincent Hom, CPD Rep	
	Barbara Maultsby, CPD Rep	
	Robert Cooper, CPD Rep	
	Nicholas Andreo, CPD Rep	
North Carolina	Libby G. Stanley, Program Coordinator	Hope Haven.
	Gary A. Dimmick, Program Manager	City of Charlotte.
	Charles T. Ferebee, CPD Director	Interlace.
Ohio	Brenda Pinkston, CPD Rep	Springfield.
	Vicki Miller, Public Trust Officer	Jefferson County Community (SRO).
	Johanna Ryan, CPD Rep	Beatitude House.
	David Fekete, Program Manager	Youngstown Area Community Action Coun.
	Kaye Smith, CPD Rep	Potential Development Programs, Inc.
	Rich Hendershot, Program Manager	The Greater Youngstown Point
	Cheryl Andrews, CPD Rep	YWCA of Youngstown.
	Rob Milburn, Public Trust Officer	City of Cincinnati.
	Larry Goodwin, Public Trust Officer	Jefferson County Community (SHP).
	Jorgelle Lawson, Program Manager	Metropolitan Residential Services.
Oklahoma	Ivan Wisley, CPD Rep	None.
	Richard McConahay, CPD Rep	
	Will Williamson, Senior CPD Rep	
Oregon	Doug Carlson, Director	
	Jan Olson, Financial Analyst	Multnomah County.

REPORT 1.—MCKINNEY HOMELESS ASSISTANCE INFORMATION FOR SENATE REQUEST—Continued

Field Office	Continuum of Care Staff	Number Fiscal Year 1998 Monitoring
Philadelphia	Joyce Gaskins, Director	Project HOME.
	Louis Williams, Deputy Director	Drueding Center/Project Rainbow.
	Gerard Lester, Program Manager	Impact Services Corporation.
	Mary Anne Bellacima, CPD Rep	Penn Foundation.
	Mary Lou DeNardo, CPD Rep	Travelers Aid Society.
	James Keegan, CPD Rep	Valley Housing Development Corp.
	Patrick Mulligan, CPD Rep	Lehigh County Housing Authority.
	Michelle Patterson, CPD Rep	
	Don Polce, CPD Rep	
	Susan Shackelford, CPD Rep	
	John Thompson, CPD Rep	
	Christopher McDonnell, Financial Analyst	
	Francis Zane, Financial Analyst	
Pittsburgh	Lynn Daniels, CPD Director	None.
	James Getsy, Program Manager	
	John Tolbert, Program Manager	
	William Kauffman, Senior CPD Rep	
	Pamela Coll, Senior Financial Ana	
	Roger Allen, CPD Rep	
	John Brennan, CPD Rep	
	Carl Bryer, CPD Rep	
	Raymond Hluska, CPD Rep	
	Thom Sumpter, CPD Rep	
San Antonio	John T. Maldonado, Director	
	Elva Garcia, CPD Rep	Housing Authority of Hidalgo County.
	Estela Garcia, CPD Rep	City of McAllen.
	Nathan Ratner, CPD Rep	
St. Louis	Ann Wiedl, Director	St. Louis.
	Allen Howard, CPD Rep	
	Elvira Kollar, CPD Rep	
	Sam McClarney, CPD Rep	
	Sandy Freeman, Senior CPD Rep	
	Jim Geraghty, CPD Rep	
	Sherman Brazil, CPD Rep	
South Carolina	Bernard Jenkins, Program Manager	None.
	C. Noel Morphis, CPID Rep	
	John Suber, CPD Rep	
	Kirk Van Laan, CPD Rep	
	Jamie Spakow, CPD Rep	
	Barbara Harris, CPD Rep	
	Brad Evatt, CPID Rep	
Tennessee	Virginia Peck, Director	Buffalo Valley, Inc.
	Mary C. Wilson, Program Manager	
	Brenda Therry, Senior CPD Rep	
	Geri Clark, Financial Analyst	
	Susan Miller, CPD Rep	
	Chris James, CPD Rep	
	Jerry Osbourn, CPD Rep	

REPORT 1.—MCKINNEY HOMELESS ASSISTANCE INFORMATION FOR SENATE REQUEST—Continued

Field Office	Continuum of Care Staff	Number Fiscal Year 1998 Monitoring
Texas	Katie Worsham, Director	S.E.A.R.C.H. (Houston).
	Carlos R. Renteria, Deputy Director	
	Jerry Jensen, Senior CPD Rep	
	Linda Clark, CPD Rep	
	Ellen Melendez, CPD Rep	
	Linda Richards, Senior CPD Rep	
	Kristin Hadawi, CPD Rep	
	James M.Johnson, Senior CPD Rep	
	Leona Hutchinson, CPD Rep	
	Elizabeth Herron, CPD Rep	
	Eddie Violette, Program Advisor	
	Johnnie Charles, CPD Rep	
	Debbie Reynolds, Program Assistant	
	Art Zavala, Senior CPD Rep	
	Brenda Jennings, Financial Analyst	
	Julie Lundin, Financial Analyst	
	Betty Domian, CPD Rep	
	Patricia Jones, Program Assistant	
	Gary Holtberg, Program Manager	
Virginia	Leroy Brown, Program Manager	VMH, Inc.
	John Baker, CPD Rep	City of Newport News.
	Robert Jennings, Financial Analyst	Smaritan House.
		Judeo-Christian Outreach Center.
		Virginia Beach CDC.
		Tap.
Washington	Dana Buckner, Senior CPD Rep	LIHI (Seattle).
	Julie Bruce, CPD Rep	Arion Court (Seattle).
	Kaycie Collins, CPD Rep	Seattle.
	David Foster, CPD Rep	Spokane.
	Carol Goodman, CPD Rep	
	Alfred Heston, CPD Rep	
	Thomas Kenny, CPD Rep	
	Lori Martin, CPD Rep	
	Wil May, CPD Rep	
	Cristina Yamamoto, CPD Rep	
Wash., DC	Patricia Myers, CPD Rep	None.
	Millicent Grant, Program Manager	
	Ronald J. Herbert, CPD Rep	
Wisconsin	Donna-Lou Hertz, CPD Rep	None.
	Marivel Turman, CPD Rep	
	Kathleen Schmidt, CPD Rep	
	Judy Pringle, CPD Rep	

Total = 294

Question. Please identify all (non-Inspector General) audits of McKinney projects conducted by HUD staff in the last 3 years, including the dates of the audits, the staff involved, the activities reviewed and the results of each audit in summary.

Answer. Attached are all of the audits (excluding Inspector General audits) of McKinney projects conducted during the last three years. The first set of reports is entitled, "CPD Program Monitoring National Totals" (Reports 2 and 3). These reports provide a summary for fiscal year 1999 and fiscal year 2000 of all on-site monitoring visits conducted by CPD Field Offices. McKinney Homeless Assistance programs are detailed in the reports as "Continuum of Care." The reports indicate that 322 on-site monitoring visits were made in fiscal year 1999 and that, to date, 133 on-site monitoring visits have been made in fiscal year 2000. The reports also detail the findings, concerns, and sanctions taken by CPD staff. The "Amount" is the dollar amount requested to be repaid for ineligible activities found during on-site monitoring of grantees.

The second set of reports, "Field Office Summary Monitoring Reports,"(Reports 4 and 5) provides an office by office listing of the grants monitored and the concerns, findings, and sanctions associated with each review. Also included is a report (Report 6) that provides greater detail for each of the findings with associated sanctions. The system contains a report on each monitoring that provides the level of detail requested.

The large report entitled, "Field Office Detailed Monitoring Report," (Report 7) provides the detailed information on each monitoring visit, including the date of the visit, the staff person who conducted the visit, the activities reviewed, and a brief summary. The report provided is for fiscal year 2000. Because of the extensive monitoring activities undertaken by CPD Field Offices, the report is large. We selected the fiscal year 2000 report because the fiscal year 1999 report is approximately 1,000 pages in length. If the purpose of the request is to determine the depth of monitoring undertaken currently by CPD Field Offices, then we are hopeful that this report will meet that purpose. If additional information is required, we will provide the larger report.

Please note that CPD's existing computer systems do not capture all the information on the monitoring activities for fiscal year 1998. Available information is listed in Report 1. The information is limited in nature because there was no standardized reporting requirements at the time for Field Office monitoring. The overall level of monitoring of these programs was also lower during fiscal year 1998, as the report indicates.

As the information provided indicates, the level of on-site monitoring by CPD Field Offices rose sharply in fiscal year 1999 and continues at high levels for fiscal year 2000. The Office of Community Planning and Development is committed to professional oversight of McKinney Homeless Assistance programs as these reports attest.

[CLERK'S NOTE: The reports required can be found by contacting HUD due to the fact that the reports were not supplied in format suitable for printing.

—CPD Program Monitoring National Totals, fiscal year 1999 (Report 2)

—CPD Program Monitoring National Totals, fiscal year 2000 (Report 3)

—Field Office Summary Monitoring Report, fiscal year 1999 (Report 4)

—Field Office Summary Monitoring Report, fiscal year 2000 (Report 5)

—Findings With Sanctions Report, fiscal year (Report 6)

—(Field Office Detailed Monitoring Report, fiscal year 2000 (Report 7)]

Question. Isn't it true that HUD supports the funding of expiring rental contracts under the Supportive Housing programs and the Shelter Plus Care program that have not been renewed under the local continuum of care selection process even where the President's budget does not support additional funding?

Answer. No. HUD's policies are consistent with the President's budget. Some Supportive Housing Program renewals have been funded outside of the annual competition to ensure that services are not disrupted in highly ranked projects, and taxpayer's investment in these projects are protected. Such renewals are allowable under the law and are always paid for out of the budget for the year their project funding expires. In addition, no project is ever funded that has not been ranked a priority in the previous year's Continuum of Care application by the local community.

In addition, the Department has never funded Shelter Plus Care projects outside of the annual competition. By law, the Department cannot fund Shelter Plus Care projects outside of an annual competition. The Administration does, however, support funding Shelter Plus Care renewals out of the Housing Certificate Fund, and has asked that $37 million be made available to do so beginning in fiscal year 2001.

Question. Isn't it true that these expiring contracts are not funded because they do not rank high enough at the local level in the local continuum of care?

Answer. Grant applications, including expiring grants requesting renewal, may go unfunded in a competition for any of three reasons: (1) they are part of a Continuum of Care that scores below the national funding line; (2) they are not placed high enough on the priority list by a funded Continuum of Care; or (3) the renewal project is found to be ineligible or of poor quality, or the project applicant or sponsor lacks the capacity to continue to operate the project. The standards to be used in making the determinations under number 3 are specified in the Notice of Funding Availability.

Question. Should expiring homeless assistance contracts be renewed where a local continuum of care does not support the renewal of these contracts?

Answer. No. This question goes to the essence of the Continuum of Care concept. The local continuum of care is in the best position to determine whether a specific renewal project should be included as a priority for funding through its analysis of local needs, understanding of the range of resources available in the community, and in-depth knowledge of the capacity, efficiency and the role of the sponsoring organization in the homeless assistance delivery system.

Question. Isn't it true that localities, including convenors and local homeless assistance providers, know the minimum amount of Federal homeless assistance each jurisdiction will receive at the time the locality or convenor makes its continuum

of care application in each fiscal year and therefore know to some degree of certainty whether an expiring contract will be renewed?

Answer. The publicly available information provided to all potential applicants as they prepare for the 2000 competition allows them, for the first time, to know with confidence the minimum prorata need share, adjusted for renewals, that is available to the continuum if they are successful in the competition. While they cannot know the exact amount (because HUD does not know the exact amount until it has determined how many areas of the country did not seek funding and those funds are redistributed to the applying continuums), the convenor and other participants in the process have sufficient information to determine prior to application submission whether a specific project, new or renewal, falls within the continuum's prorata need share depending upon its placement on the priority list. It should be noted that a significant increase in the Fair Market Rents for a community published in the Federal Register in October of each year, after the submission of applications, would increase the budgets for any Shelter Plus Care and SRO project applications submitted and could, therefore, result in a project going unfunded that would otherwise have been funded under that continuum.

HOMELESS ASSISTANCE BLOCK GRANT PROGRAM

Question. Does HUD support a block grant for states and localities to address homeless assistance needs, especially since such an approach could rely on local decisionmaking while integrating funding decisions with the procedures and decisions associated with the existing HOME, CDBG, Public Housing, and Section 8 programs?

Answer. HUD does not believe it is necessary to implement such a legislative change. Current procedures best address the multi-faceted needs of the program. Originally, in coordination with the Interagency Council on the Homeless, HUD held 17 regional interactive forums across the country early in President Clinton's first term in office to discuss how the Federal government should proceed to better address homelessness. Valuable input was provided from more than 10,000 representatives of state and local governments, not-for-profit providers of housing and services, advocates for homeless people, and currently and formerly homeless persons. As a result, HUD made numerous changes to how competitive program funds are awarded.

HUD has continued to improve and refine the competitive award process since initial implementation in 1994. In addition to having a single application for all three competitive programs, the continuum helps assure all parties are given an opportunity to be involved in developing the community wide application. Moreover, communities are able to prioritize their projects as they would through a formula approach. Finally, retaining a national competition helps assure a high level of quality and performance that a formula approach might not achieve. As a result of the successes we've been able to accomplish through the competitive process, HUD no longer deems it necessary to implement a legislative change.

HOPE VI

Question. Mr. Secretary, as you know, I am a big fan of the HOPE VI program and have supported the significant funding of this program since its inception. Nevertheless, it is a costly program and there will come a time in the next few years where we will have taken down the worst public housing and replaced it with mixed income public and private housing. How should this program evolve?

Answer. Although HOPE VI has been successful in revitalizing many of this nation's most severely distressed public housing developments, a significant need still remains that will not be adequately addressed by HOPE VI appropriations in the next couple of years.

Each year, the Department receives four times the number of applications than can be funded through annual appropriations. Moreover, there are 30,000 units identified under the Section 202 mandatory conversion provision that have not yet been addressed. Finally, a HUD-sponsored study by Abt Associates, completed in April 2000, estimated that the backlog of unmet capital needs as of June 1998 was $23 billion and the annual accrual was $2.1 billion. If funding for Capital Programs is insufficient to eliminate the backlog, it is possible that conditions at under funded developments will worsen.

Question. In addition, I am very concerned about costs of the HOPE VI program and how HUD keeps the costs of this program down. How does the per unit costs of HOPE VI projects compare to similar private sector multifamily housing?

Answer. The Department has taken great efforts to ensure that costs are in line with relevant industry standards. HUD instituted cost control guidelines for soft

costs and a stringent TDC policy that does not permit exceptions. To oversee this effort, a quarterly tracking system has been implemented that monitors data on costs, leveraging, construction progress and other management indicators.

—*Total Development Cost*.—In a March 1999 notice, the Department established Total Development Cost (TDC) and Cost Control Policy consistent with the Public Housing Reform Act of 1998. The notice established clear cost limits for public housing funds used in the three elements of HOPE VI developments, namely, housing units, community renewal efforts, and community and resident social services. The new Housing Cost Cap (HCC) was based on an average of RS Means (Average) and Marshall and Swift (Good) regional estimates for housing construction costs based on housing type and size. The new cap is higher than the prior HCC which was based on Boeckh (Average) and Marshall and Swift (Average). The new HCC standard reflects the quality of housing needed to attract middle income families into HOPE VI developments. Unlike the previous policy, no exceptions from the current TDC will be granted. The policy has been in effect for 1 year and is now being evaluated. An analysis of changes in costs over the years has been conducted, and the findings have been discussed with OMB and congressional staff. Based on the analysis and input received, the modified guidance is expected to be published as a Proposed Rule in the near future. Soft Cost Controls—The Department instituted cost control guidance that will limit the development of soft costs associated with mixed-finance development (e.g., developer fees, administration fees, program management fees), and create incentives for competitive pricing. The controls include "safe harbors" and maximum fee ranges that are based on industry standards which were developed with input from housing authorities, developers and other housing industry representatives. If a project is at or below a "safe harbor" standard, no further review is required. If a project is above a "safe harbor" standard, additional review by, and negotiation with, HUD are necessary. These guidelines, "Cost Control and Safe Harbor Standards" are included in a document developed by the program office. This document has been distributed to all HOPE VI program sites, and is also included in the NOFA application completed by prospective grantees.

—*Competitive Procurement*.—HUD requires that developers and program managers be competitively procured thereby assuring that costs and fees are consistent with the private market. The Department reviews and approves developer and program manager procurements and contracts to verify that the processes are open and competitive.

—*Management Controls*.—As noted below, a computerized tracking and data collection system for effective program management and data retrieval and analysis has been developed. Every quarter grantees report data regarding costs, funds obligated/expended, construction progress, leveraging, and other management indicators. The Department is currently expanding the scope of the data collected to document what is happening to the people in a HOPE VI site (i.e., how many people gain employment, how many in job training, how many receiving case management, etc.). The Department has prioritized the receipt of accurate and timely information and has instituted a policy that freezes receipt of a grantee's HOPE VI funds if reports are not submitted within 30 days following the end of the quarter. This data tracking system enables more effective oversight by HUD grants managers and Public Housing Authority (PHA) staff.

—*HOPE VI Construction Costs as Compared with Private Sector*.—Per unit construction costs are, by design, comparable to similar private sector housing. Because the HCC is based on regional industry standards, it ensures that public housing funds that are spent on construction do not exceed what the private sector would pay for a comparable unit. 1999 grantees reported that public housing funds would be used for $58,722 per unit cost[1] to public housing funds associated with a HOPE VI construction—well below the average HCC of $88,000 in l999. In most cases, the construction cost are supplemented with Low Income Housing Tax Credit (LIHTC) funds and other funding. An informal survey of HOPE VI developers yielded similar conclusions—the per unit hard cost of HOPE VI construction, adjusted for Davis-Bacon wages and Section 3 requirements, is very comparable with private and subsidized developments.

[1] This figure includes dwelling unit construction and equipment and 50 percent of site improvement costs. It assumes that builder's overhead and profit are included in dwelling unit construction.

TABLE 1.—AVERAGE PUBLIC HOUSING FUNDS PER PH UNIT RELATED TO HCC BY YEAR

Grant Year	1993	1994	1995	1996	1997	1998	1999
PH $Related to HCC [1]	$323,300,312	$226,466,180	$237,755,257	$222,259,707	$261,509,345	$278,428,844	$321,032,692
Avg. PH $per PH Unit Related to HCC	61,558	37,321	39,672	41,865	61,186	45,236	58,722
Average PH $Per PH Unit Related to HCC for All Years				$48,568			

[1] PH $'s Related to HCC include the following: Dwelling Unit Construction and Equipment and 50 percent of Site Improvement Costs.

NOTE: Assumes that builders' overhead and profit is included in Dwelling Unit Construction.
Source: HOPE VI Quarterly and Baseline Data as of 12/31/99.

TABLE 2.—HCC COST PER UNIT CALCULATIONS BY GRANTEE

[HOPE VI Quarterly Data as of 12/31/99]

Award Year	Main City	Development	HCC Cost	Public Housing Units	Public Housing Cost per Unit Related to HCC
1993	Atlanta	Techwood Homes/Clark Howell Homes	$25,382,913	360	$70,508
1993	Boston	Mission Main	28,596,695	445	64,262
1993	Charlotte	Earle Village	20,357,066	294	69,242
1993	Cuyahoga	Outhwaite Homes/King Kennedy (combined)	33,089,097	503	65,783
1993	Houston	Allen Parkway Village	21,118,346	600	35,197
1993	Kansas City	Guinotte Manor	31,389,803	412	76,189
1993	Los Angeles	Pico Gardens & Aliso Apartments	26,057,887	429	60,741
1993	Milwaukee	Hillside Terrace	27,813,071	456	60,994
1993	New Haven	Elm Haven	21,093,297	454	46,461
1993	Philadelphia	Richard Allen Homes	31,626,743	408	77,517
1993	Pittsburgh	Allequippa Terrace	13,886,600	535	25,956
1993	San Francisco	Bernal/Plaza	29,236,491	356	82,125
1993	Washington DC	Ellen Wilson Homes [1]	13,652,305	129	105,832
	Subtotal		323,300,312	5,381	60,082
1994	Baltimore	Lafayette Courts	11,607,960	311	37,325
1994	Camden	McGuire Gardens	25,795,888	253	101,960
1994	Chicago	Cabrini-Green	500,000	700	[2] 714
1994	Columbus	Windsor Terrace	24,231,323	372	65,138
1994	Dallas	Lakewest	13,698,934	335	40,892
1994	Denver	Quigg Newton Homes	11,126,593	400	27,816
1994	Detroit	Jeffries Homes	28,610,345	537	53,278
1994	New Orleans	Desire	23,148,032	433	53,460
1994	Newark	Archbishop Walsh Homes	29,686,740	498	59,612
1994	Oakland	Lockwood Gardens/Lower Fruitvale	13,651,975	438	31,169
1994	Puerto Rico	Cristantemos y Manuel A. Perez	13,225,005	1,080	12,245
1994	San Antonio	Spring View	21,712,237	421	51,573
1994	Springfield	John Hay Homes	9,471,150	290	32,659
	Subtotal		226,466,180	6,068	37,321
1995	Baltimore	Lexington Terrace	9,586,865	250	38,347
1995	Boston	Orchard Park	15,084,196	380	39,695
1995	Cuyahoga	Carver Park	13,760,535	471	29,216
1995	Detroit	Parkside Homes	27,723,553	462	60,008
1995	El Paso	Kennedy Brothers	20,729,652	364	56,950
1995	Indianapolis	Concord/Eagle Creek	17,148,599	190	90,256
1995	Memphis	LeMoyne Gardens	27,879,624	343	81,282
1995	New York	Arverne/Edgemere Houses	29,359,071	1,789	16,411
1995	Pittsburgh	Manchester	5,500,000	132	41,667
1995	San Antonio	Mirasol	24,528,409	500	49,057
1995	San Francisco	Hayes Valley (B&C)	12,962,971	117	110,795
1995	Seattle	Holly Park	18,417,524	400	46,044
1995	St. Louis	Darst-Webbe	15,074,260	595	25,335
	Subtotal		237,755,257	5,993	39,672
1996	Atlanta	Perry Homes	11,668,286	375	31,115
1996	Baltimore	Hollander Ridge	14,226,891	225	63,231
1996	Charlotte	Dalton Village	10,495,145	186	56,426
1996	Chester	Lamokin Village	8,418,294	150	56,122
1996	Chicago	ABLA (Brooks Extension)	19,547,698	396	49,363
1996	Chicago	Henry Horner	15,417,283	376	41,003
1996	Chicago	Robert Taylor Homes	16,288,460	251	64,894
1996	Cleveland	Riverview/Lakeview	9,991,250	290	34,453
1996	Detroit	Herman Gardens	16,814,591	672	25,022
1996	Holyoke	Jackson Parkway	7,097,788	125	56,782
1996	Jacksonville	Durkeeville	11,664,000	200	58,320

TABLE 2.—HCC COST PER UNIT CALCULATIONS BY GRANTEE—Continued

[HOPE VI Quarterly Data as of 12/31/99]

Award Year	Main City	Development	HCC Cost	Public Housing Units	Public Housing Cost per Unit Related to HCC
1996	Kansas City	Theron B. Watkins Homes	7,936,372	99	80,165
1996	Louisville	Cotter & Lang Homes	9,401,715	610	15,413
1996	New Orleans	St. Thomas	11,100,000	387	28,682
1996	Pittsburgh	Bedford Additions	21,273,764	340	62,570
1996	San Francisco	North Beach	12,412,868	229	54,205
1996	Spartanburg	Tobe Hartwell/Extension	9,279,680	128	72,498
1996	Tucson	Connie Chambers	2,958,493	200	14,792
1996	Wilmington	Robert S. Jervay Place	6,267,130	70	89,530
	Subtotal		222,259,707	5,309	41,865
1997	Allegheny County	McKees Rocks Terrace	10,601,385	124	85,495
1997	Baltimore	Murphy Homes, Julian Gardens	10,555,543	260	40,598
1997	Buffalo	Lakeview Homes/Lower West Side	10,559,280	545	19,375
1997	Chester County	Oak Street	8,750,026	130	67,308
1997	Elizabeth	Pioneer Homes, Migliore Manor	9,633,696	300	32,112
1997	Helena	Enterprise Drive	801,655	14	57,261
1997	Houston	Allen Parkway Village 2	11,721,030	185	63,357
1997	Jersey City	Curries Woods	18,156,869	469	38,714
1997	Kansas City	Heritage House	6,765,714	79	85,642
1997	Knoxville	College Homes	14,993,250	144	104,120
1997	Nashville	Vine Hill Homes	9,672,273	136	71,120
1997	Orlando	Colonial Park	4,043,603	68	59,465
1997	Paterson	Christopher Columbus	7,936,799	137	57,933
1997	Peoria	Colonel John Warner Homes	5,665,221	141	40,179
1997	Philadelphia	Schuylkill Falls	19,374,797	108	179,396
1997	Portsmouth	Ida Barbour Revitalization	15,137,500	278	54,451
1997	Richmond	Blackwell [3]	13,445,300	472	28,486
1997	San Francisco	Valencia Gardens	16,720,835	246	67,971
1997	St. Petersburg	Jordan Park	14,418,771	261	55,244
1997	Stamford	Southfield Village	16,644,279	215	77,415
1997	Tampa	College Hill/Ponce de Leon [3]	12,848,160	403	31,881
1997	Washington DC	Valley Green/Sky Tower	13,003,825	282	46,113
1997	Winston-Salem	Kimberly Park Terrace	10,059,536	152	66,181
	Subtotal		261,509,345	5,149	50,788
1998	Albany	Edwin Corning Homes	20,567,888	250	82,272
1998	Atlanta	Carver Homes	24,775,489	399	62,094
1998	Baltimore	Flag House Courts	7,175,000	140	51,250
1998	Charlotte	Fairview Homes	19,466,251	330	58,989
1998	Chester	McCaffery Village	7,259,678	118	61,523
1998	Chicago	ABLA Homes	22,258,001	945	23,553
1998	Cincinnati	Lincoln Court	12,420,865	250	49,683
1998	Dallas	Roseland Homes	22,232,707	511	43,508
1998	Denver	Curtis Park Homes & Arapahoe Cts	14,160,409	261	54,254
1998	Greensboro	Morningside Homes	9,338,561	456	20,479
1998	Lexington	Charlotte Court	7,132,855	218	32,720
1998	Los Angeles	Aliso Village	16,071,918	269	59,747
1998	Milwaukee	Parklawn Housing Development	17,800,250	420	42,382
1998	New Brunswick	New Brunswick Homes	3,984,007	86	46,326
1998	New York	Prospect Plaza	7,137,589	284	25,132
1998	Oakland	Chestnut Court and 1114 14th Street	6,880,924	95	72,431
1998	Philadelphia	Martin Luther King Plaza	15,709,884	168	93,511
1998	Roanoke	Lincoln Terrace	9,100,388	276	32,972
1998	Seattle	Roxbury House and Village	6,083,477	211	28,832
1998	Tulsa	Osage Hills Apartments	20,343,911	388	52,433
1998	Wilmington	Eastlake Family Public Housing	8,528,794	80	106,610

TABLE 2.—HCC COST PER UNIT CALCULATIONS BY GRANTEE—Continued

[HOPE VI Quarterly Data as of 12/31/99]

Award Year	Main City	Development	HCC Cost	Public Housing Units	Public Housing Cost per Unit Related to HCC
	Subtotal		278,428,844	6,155	45,236
1999	Allegheny County	FDR & Homestead Apartments	1,790,392	230	[4] 7,784
1999	Atlanta	Joel C. Harris Homes	18,571,737	300	61,906
1999	Atlantic City	Shore Park/Shore Terrace	22,196,379	214	103,721
1999	Baltimore	Broadway Homes	9,506,690	84	113,175
1999	Birmingham	Metropolitan Gardens	21,055,785	420	50,133
1999	Bradenton	Rogers Garden Park & Rogers Addition	7,498,832	180	41,660
1999	Cambridge	John F. Kennedy Apartments	3,242,500	50	64,850
1999	Cincinnati	Laurel Homes	20,320,994	259	78,459
1999	Columbia	Saxon Homes	14,547,081	186	78,210
1999	Dayton	Edgewood Court, Metro Gardens and Metro Gardens Annex.	9,208,801	140	65,777
1999	Decatur	Longview Place	22,177,622	322	68,875
1999	Gary	Duneland Village	8,947,489	93	96,210
1999	Greenville	Woodland/Pearce Homes	9,558,376	129	74,096
1999	High Point	Springfield Townhouses	11,400,790	160	71,255
1999	Lakeland	Washington Park Homes & Lake Ridge Homes.	11,547,533	359	32,166
1999	Miami	Scott/Carver Homes	19,090,434	223	85,607
1999	Miami	Ward Tower	4,072,500	95	42,868
1999	Mobile	Central Plaza Towers	2,907,500	100	29,075
1999	Nashville	Preston Taylor Homes	22,917,642	370	61,940
1999	New Bedford	Caroline Street Apartments	2,142,415	57	37,586
1999	Newark	Stella W. Wright	21,408,000	588	36,408
1999	Oakland	Westwood Gardens	3,533,500	46	76,815
1999	Raleigh	Halifax Court	5,583,857	122	45,769
1999	Seattle	Rainier Vista Garden Community	20,866,185	250	83,465
1999	Washington DC	Frederick Douglass Dwellings & Stanton Dwellings.	18,052,431	370	48,790
1999	Wheeling	Grandview Manor/Lincoln Homes	8,887,229	120	74,060
	Subtotal		321,032,692	5,467	58,722
	Total—All Years All Sites.		1,870,752,335	38,518	48,568

[1] Ellen Wilson homes has 129 Cooperative Agreement Units.

[2] Cabrini Green's HCC figures are unusually low because the Chicago Housing Authority does not plan to build new units, but buy scattered site housing. The HCC does not include acquisition costs which are estimated at $33 million. As a result, the HCC figure only reflects the cost of site improvements. If acquisition costs were included, hard construction costs would be $47,900/unit.

[3] For Richmond—Blackwell and Tampa—College Hill/Ponce De Leon 3/31/2000 unit data was used.

[4] Allegheny's HCC costs are low because the housing authority is rehabbing instead of building new units. The authority is also leveraging significant resources for the hard construction costs which are not reflected in the figures above (only public housing dollars are included). $1.7 million of public housing funds and $5.6 million of leverage funds are going towards hard construction costs. If all sources are considered, the costs related to HCC average $32,000/unit.

Notes: HCC cost is estimated as the HOPE VI Dwelling Unit Construction Cost, Dwelling Unit Equipment Cost and 50 percent of Site Improvements.

On a program wide basis, this correlates to the information provided on the HOPE VI TDC Guidance Chart.

Only 128 sites—Alexandria not required to report this information.

Question. What accounts for any differences in the per unit costs of HOPE VI projects with similar private sector multifamily housing?

Answer. Because the Housing Cost Cap (HCC) is pegged to regional industry standards by housing type, "vertical" construction costs are comparable with the private sector. However, there are additional construction costs associated with HOPE VI projects that increase overall development costs and do not similarly impact private development projects, as described below.

1. *Demolition and Site Remediation*.—The HOPE VI program was created to revitalize severely distressed public housing which makes it unique when compared to other types of private-sector construction and development. Unlike the majority of private-sector multifamily developments which are built on environmentally safe,

vacant sites, many HOPE VI projects incur extraordinary costs to demolish distressed buildings and remediate existing environmental hazards that are often associated with large-scale urban redevelopment, (e.g., lead and asbestos abatement, soil remediation, etc.). Such costs are not directly attributable to the cost of new construction, but are unavoidable in the HOPE VI revitalization process.

2. *Community Revitalization.*—HOPE VI developments also include provisions for services and facilities that will revitalize the community and help residents become self-sufficient (e.g., community facilities, community and supportive services and relocation of residents). These costs, not required in traditional private sector development, are vital to achieve the intended transformation of neighborhoods and the lives of the residents.

3. *Federal Wage and Hiring Regulations.*—Compliance with federal wage and hiring regulations, including Davis-Bacon wages, Section 3, and resident participation requirements, tends to apply upward pressure on construction costs.

Question. Also, how do the administrative costs of this program compare with private sector costs and what is the average administrative cost (i.e. including attorney fees, etc.) per project?

Answer. Public Housing Authorities (PHAs) provide a unique link between the residents of the local community and the Federal Government for both the development and administration of assisted housing. Due to this unique role of PHAs, this function has been contracted out to the private sector. However, this indispensable role in the process also contributes to higher soft costs for HOPE VI than those associated with private sector development. Additional costs incurred by the PHAs include: administrative costs, program and construction management fees, external legal counsel, and other consultants, as well as increased coordination and oversight due to complex financing partnerships and other business arrangements between the Housing Authority and the city, developers, business sector, etc. Since HOPE VI began in 1993:

—PHA's internal administrative costs have averaged 2.79 percent of total project costs.

—Planning and professional services (includes program/construction management, external legal counsel, other fees) have averaged 4.22 percent of total project costs.

—The impact of these higher HOPE VI soft costs add an average of 7 percent to the total project costs.

These additional costs are explained in the following paragraphs:

PHA Administration.—HOPE VI developments must pay for the PHA's overall administrative costs associated with HOPE VI. There is no comparable cost in private sector projects.

PHA Capacity.—Many HOPE VI developments also include costs for program management and construction management due to the complexity of the program and the lack of in-house capacity. Typical private sector developers do not incur these costs since the required skills are resident with existing staff.

Complex Financing.—Virtually all HOPE VI developments involve complex financing mechanisms which include multiple funding sources, increasing the legal and financing costs of the project. It is estimated that the legal costs and time delays for approvals associated with mixed-finance closings can increase costs by as much as 10–15 percent over unsubsidized, non-Federal, privately financed development.

TABLE 2.—PERCENTAGES OF BUDGETED HOPE VI SOFT COSTS TO TOTAL PROGRAM BUDGET

Soft cost category	Average for all HOPE VI sites	Range	
		Low	High
PHA's Internal Administrative Costs	2.79	.....	13.6
Planning and Professional Services (PM/CM, Legal Fees, and Other Fees)	4.22	.....	16.7
HOPE VI Soft Cost Total	7.01	.....	.....

Source: HOPE VI Quarterly Data as of 12/31/99.

Question. Please provide a list of all current HOPE VI projects and the per unit costs of each project.

Answer. See table 2 on page 537.

HUD INCOME VERIFICATION REQUIREMENTS FOR PUBLIC AND ASSISTED HOUSING

Question. As you know, we have been very concerned that each year an independent audit of HUD's financial statements indicate that some $900 million is lost through improper, illegal or negligent reporting of income by tenants in HUD's public and assisted housing programs. This is a significant amount of money that could help maintain the funding level of HUD programs. This is an important responsibility and I would like to know the status of HUD's efforts to implement a system that ensures the residents in the HUD's rental assistance programs are paying the appropriate level of rent.

Answer. The tenant income verification process is a state-of-the-art fraud prevention system that addresses a long-standing material weakness. This system is also designed to ensure that eligible American families receive the correct amount of rental assistance. The system uses computer matching software to compare tenant reported information from HUD systems with income data stored in Social Security Administration (SSA) and Internal Revenue Service (IRS) databases.

Tenants who under report income may have their rental assistance reduced or terminated, or potentially face prosecution. Tenants also may be required to re-pay any excess rental assistance. However, the focus on HUD's efforts this year are on setting correct baseline incomes and rents.

HUD is planning to mail out most, if not all, of the income discrepancy letters in June 2000; 230,000 in all. In February 2000, about 875 letters were sent to tenants.

In the interest of fairness to all parties, the Department is also addressing overreporting of income and will soon be mailing letters, as part of this initiative, in the near future, to tenants who might not have received all of the rental assistance to which they were entitled.

The next steps will be HUD monitoring of progress in the resolution of the income discrepancies. This will include:

—1. an analysis of data that public housing authorities, owners and agents (POAs) will submit to HUD on income discrepancy resolution;
—2. visits to some POAs to review progress and techniques employed; and
—3. supplemental training for POAs, as needed.

Additional training is underway. The Department has also developed a fact sheet explaining the tenant income verification process and HUD's intent to have eligible tenants pay correct amounts. This fact sheet will be provided to approximately 6.1 million tenants occupying HUD assisted housing.

ATTACHMENT A

The $900 million underpayment figure calculated by the Inspector General is wrong.

—It is wrong because the IG made very dubious assumptions in calculating its figure-sampling indicates that the figure may be far lower.
—The figure does not attempt to calculate the extent of overpayments by tenants.
—The figure does not take into account the fact that many kinds of income have been excluded from rent calculations at the direction of Congress.
—Sheila Crowley, President of the National Low Income Housing Coalition told Congress "we believe that a substantial percent of the discrepancy between rent certifications and tax returns that is identified in the Inspector General's report has occurred for one of a number of legal and legitimate reasons or is the result of honest mistakes or is rooted in errors on the part of housing authorities or property owners."
—The underpayment estimate is also misleading because it is not a reasonable estimate of the actual amounts that could realistically by recovered by the government. In fact, verifying income will probably lead to an additional $80 million.
  —Studies show that, once presented with this information, many tenants simply move away.
  —It often costs more to collect the money than the amount the tenant owes.
  —Tenants often simply do not have the money for the landlord to collect.
  —Verifying tenant income will be most helpful in making sure the right people receive assistance. The Department is committed to ensuring that only those eligible receive assistance and that others be replaced by someone languishing on long waiting lists due to the failure of Congress to adequately fund the Section 8 program.

Question. In addition, please advise on the safeguards that HUD is putting in place to ensure that the process itself does not become an unreasonable burden on PHAs and tenants, and how personal privacy rights are protected and respected.

Answer. The tenant income verification process imposes minimal additional requirements on Public Housing Agencies, Owners, and Agents (POAs) and tenants. Tenants have always had the obligation to report their income completely and accurately and POAs have always had the responsibility to verify their incomes. This Program provides a new tool to POAs to verify tenant income. The only additional requirement for tenants is to resolve discrepancies identified by the income matching, and for POAs to report on their resolution of these discrepancies.

Under this program, the personal privacy rights of tenants are fully protected and respected. HUD strictly follows Social Security Administration (SSA) and Internal Revenue Service (IRS) guidelines regarding release of confidential income data. The computer matching program provides a high degree of accuracy. Extensive software testing has been completed to assure that the computer matching is properly conducted. Real Estate Assessment Center (REAC) has developed procedures to minimize the "false positive" results that may sometimes occur and reduce related administrative burdens or other adverse effects.

The following steps have been taken to ensure that tenants do not receive erroneous income discrepancies letters were:

—1. Annualization of income to produce income for the calendar year that would be comparable to SSA and IRS data;
—2. Eliminating residents who did not receive rental assistance for the entire calendar year for the match; and
—3. The use of income thresholds.

Procedures were also developed to minimize the effects on tenants who do receive letters and who have complied with applicable income reporting requirements. These include:

—1. Careful wording of the letter to the tenant;
—2. Written instructions and training for POAs that describe ways to minimize the burden on the POAs and the tenants,
—3. Establish enhanced grievance procedures for tenants to ensure due process, and
—4. Establish special toll-free phone numbers for tenants and POAs to answer all program questions.

HUD POLICY TO VOUCHER OUT ALL HUD-OWNED AND -HELD PROPERTIES

Question. Mr. Secretary you have discussed the need to create a production program, even suggesting using FHA single family mortgage insurance default reserves as a way to leverage funding for the development of new units of affordable low-income multifamily housing. However, HUD's stated policy for its HUD-owned and HUD-held multifamily properties is to voucher out all families, even the elderly and disabled. This means that we are likely losing these multifamily housing units for low-income use, especially very low-income use. In addition, many of these multifamily housing projects are designed for the elderly or disabled and are hooked into needed services for these populations. In other cases, the housing is in better neighborhoods where there are good schools, transportation and job opportunities which will be lost to these residents. For the record, I am including a property disposition memorandum from Gary Eisenman, General Deputy Assistant Secretary for Housing, that compels the vouchering out of these properties and replaces existing handbook requirements.

How do you square this policy with your acknowledgment that we need to produce additional affordable low-income housing and the request for additional, incremental vouchers?

Answer. The Department shares the Senator's concern for the preservation of affordable housing. A careful reading of HUD's outstanding guidance to the field shows that we preserve affordable housing projects which can and should feasibly be preserved. Given the nature of elderly housing, we continue the project based Section 8 when they are sold, provided it is needed as elderly housing and is feasible to preserve. On family projects, rather than using project based Section 8 as the affordability tool, we provide eligible tenants with Section 8 Vouchers. With Vouchers, an individual can remain in the preserved project, or move to other accommodations. In addition, when these properties are sold at foreclosure or from the owned inventory, if they need to be preserved as affordable housing, they are sold with requirements that they be repaired, and operated as affordable housing. These requirements are enforced through land use restrictions that generally last at least 20 years. Many purchasers utilize the Low Income Housing Tax Credit program, which is another way to maintain affordable housing without the use of project-based Section 8. Requiring that projects be repaired and remain affordable provides the tenants with Vouchers an opportunity not afforded to them if we were to sell

the projects with project based Section 8. It gives the tenants a choice, and an ability to decide whether to stay, or relocate. Many choose to stay, and many choose to relocate. Freedom of choice is not something found with project-based Section 8.

HUD also uses its ability to provide Up Front Grants for projects that need to be preserved We have sold over 60 projects in the last few years with such grants. This is consistent with our policy to preserve.

Not all projects are needed as continued sources of affordable housing, and some that may be needed cannot cost effectively be repaired or rebuilt. In those cases, residents are offered Vouchers and assistance in finding alternate decent, safe and sanitary housing.

In addition, the memorandum from General Deputy Assistant Secretary Eisenman that the Senator introduced into the record has nothing to do with vouchering out properties. Unfortunately, the word "voucher" has several meanings at HUD. It not only means a Section 8 voucher that can be given to a tenant to seek affordable housing, it also means the document that is prepared by the owner of a Section 8 project to obtain the monthly Section 8 payment; in that instance, its more like a monthly invoice. The subject memorandum was simply guidance to HUD's field staff that it must voucher (invoice) for Section 8 payments on projects in HUD's owned inventory and those for which HUD is Mortgagee-in-Possession. While it is true that this memorandum did supersede outstanding handbook instructions, the change continues the project-based contracts in an active status.

We are not abandoning affordable housing that needs to, and feasibly can be preserved. If preservation is feasible, projects are being preserved. Projects can and are being preserved as affordable housing using preservation tools other than project-based Section 8 (except for elderly projects).

GNMA AND FHA APPLICATION OF CREDIT REFORM

Question. Mr. Secretary, for the first time since the enactment of credit reform in 1992, the Administration has requested $40 million for GNMA administrative contract expenses. This also has become an FHA issue with appropriations having to pay for "non-administrative overhead" for both single family and multifamily mortgage insurance programs. Why are these additional costs being charged to the appropriations process and what do these additional costs cover? Also, please provide a legal analysis on why and how credit reform applies to GNMA and FHA activities despite the availability of program revenues which should be available to cover all costs? Also, please provide a legal analysis on why and how credit reform applies to GNMA and FHA activities despite the availability of program revenues which should be available to cover all costs?

Answer. Section 1 of the National Housing Act (NHA) contains a permanent indefinite appropriation which permits GNMA to pay administrative expenses, including contracting expenses, from revenues. Section 209 of the HUD Administrative Provisions printed in the Appendix to the President's Budget for fiscal year 2001, if enacted, would eliminate such authority for the payment of contracting expenses under section 1 of the NHA, and in effect, require that GNMA's contracting expenses become an appropriated line item.

Until the enactment of HUD's fiscal year 2000 Appropriations Act (Public Law 106–74), Section 1 of the NHA also permitted FHA to pay contracting expenses from revenues. In the fiscal year 2000 Appropriations Act, Section 212 eliminated FHA authority for the payment of contracting expenses under Section 1 of the NHA, while the FHA accounts included appropriated amounts for FHA administrative contract expenses. Section 209 and the GNMA account language proposed in the Administration's fiscal year 2001 budget would establish the same funding mechanism for GNMA contracting expenses.

The proposed changes for GNMA and enacted changes for FHA with respect to funding of contracting expenses have not been based on the application of the Federal Credit Reform Act (FCRA) to GNMA and FHA as a matter of law.

In fact OMB's general counsel has issued a legal opinion that explicitly notes the legal appropriateness and applicability of Section 1 of NHA. Rather, these amendments have been proposed by the Administration solely to make the administration of these GNMA and FHA contracting expenses conform with the policies of the Administration with respect to the FCRA. It should be noted that GNMA's contracting expenses under Section 1 of the NHA are reviewed annually by Congress and OMB as part of the President's Budget and are reviewed quarterly by Treasury and OMB in the SF 133 Report on Budget Execution.

FHA REVENUES

Question. Mr. Secretary, you have made a number of statement indicating that the FHA Mutual Mortgage Insurance account has an additional $5 billion in revenues that could be made available for other housing programs, including a new multifamily housing production program. What are these funds?

Answer. These estimates of additional funds were calculated by using the results of the 1999 Actuarial Review in the MMI models used for the 2001 Budget. New subsidy rates were calculated for fiscal years 2002–2006 using the 1999 Review data. Then the difference in the subsidy rates before and after the 1999 actuarial review was multiplied by the dollar value of each year's estimated book of business for 2002–2006. The sum of those figures was rounded to $5 billion.

Question. Are they currently maintained in the FHA Mutual Mortgage Insurance account or are they projections of future income subject to income rate fluctuations and other market forces?

Answer. The $5 billion is a projection of additional negative subsidy estimated to be generated in fiscal years 2002–2006. Under Credit Reform, subsidy rates are calculated on the basis of expected performance over the entire life of a particular group of loans; thus, any subsidy rate calculation is subject to future market forces. The $5 billion is based on the most recent data, which was used in the fiscal year 1999 Actuarial Review.

Question. In, addition, are these funds available for spending without being subject to offsets or pay-go considerations?

Answer. The additional $5 billion in negative credit subsidy is a offset of both budget authority and outlays and represents budgetary resources which could be applied towards critical housing needs of the Nation without diminishing the currently projected budget surplus of the Government. Whether Congressional budget procedures require specification of a discretionary offset, or subject this proposal to pay-go requirements for mandatory activities, will depend on the applicable Congressional Budget Resolution, and the specific nature of the proposal under development by the Administration.

Question. Please provide a legal analysis on how these funds may be made available for non-FHA housing and community development programs?

Answer. As just indicated, the $5 billion may serve as an offset for other spending within the unified Federal budget. These funds are deposited into the FHA Mutual Mortgage Insurance Fund and whether additional legal authority is necessary will depend on how the funds would be utilized (as an offset or a fund source) and on the specific nature of the proposed use. Direct use of these funds for non-FHA programs would require an amendment to sections 1 and 202 of the National Housing Act and/or obligational authority in an appropriations act.

FHA HYBRID ARM LEGISLATION

Question. Mr. Secretary, the Administration has proposed a new FHA adjustable rate mortgage (ARM) insurance program. What is HUD's prior experience in underwriting ARMs, including the default and foreclosure rates?

Answer. As one would expect with a riskier product line such as the adjustable rate mortgage (ARM), historically ARMs have had a higher default and claim rate than the relatively low risk fixed-rate mortgages (FMRs). The performance gap between these two products however has narrowed since FHA tightened its underwriting standards for ARMs in 1998.

Question. Why would this new ARM program be less financially risky to the Department?

Answer. The risk of the current ARM program was substantially reduced in January 1998 by requiring consideration of the second year rate in the underwriting analysis (rather than the entry rate) and by eliminating any form of buydowns on these loans that contributed to payment shock.

If the hybrid ARM proposed legislation is enacted, we would continue to impose underwriting requirements that mitigate against unacceptable risk. Further, the hybrid ARMs would lock in an interest rate for several years (rather than just the first year) thus allowing those first-time homebuyers borrowers that may (a) need the mortgage for only a few years and/or (b) need the lower initial payments to take advantage of the program either to acquire some equity, and then sell the property and move to a more desirable home or to refinance the current home.

AMERICAN PRIVATE INVESTMENT COMPANIES (APIC)

Question. Mr. Secretary, the Department does not have an outstanding track record in providing targeted funding for economic development, such as APIC. How would APIC work?

Answer. As configured in the proposed legislation (Title 3, H.R. 2848 and H.R. 2764), APIC would create a number of companies licensed by HUD as for-profit, private venture capital firms. The program would provide government guarantees of company debentures, provided the licensed APIC's committed at least $25 million in private equity capital. Each APIC would be entitled to receive $2 in government guarantees of company debentures for every $1 of its private committed equity. HUD's debt guarantees cannot, however, exceed $300 million for APIC-issued debentures in fiscal year 2000. APICs will invest in a broad array of firms and industry sectors. As you know the President submitted legislation to authorize the APIC program and this legislation is proceeding through Congress. In addition, the President and the Congress have focused on a broad community revitalization package which would include APIC as an important capital development tool.

Question. Why wouldn't Treasury, the Small Business Administration or CDFI be a more appropriate agency to administer an APIC-like program?

Answer. Neither the SBA nor the Treasury can target their resources to low-income areas, as HUD is able to. Further, SBA restrictions on the size and types of businesses it assists would prevent that agency from financing the large-scale businesses and real estate developments envisioned that APICs will financially assist in urban and rural low-income areas. HUD has the experience in working on such projects through the Community Development Block Grant and other economic development programs. Nevertheless, the Department of Treasury and the SBA will act as program advisors to HUD in development and administering the APIC program.

Question. Wouldn't HUD or intermediaries be picking "winners and losers" in the APIC program?

Answer. HUD or intermediaries will be "picking" winners and losers in the APIC program, only in the sense that some competition applications are better than others. The proposed APIC legislation enables HUD to competitively select APICs and to license them for making equity and credit investments in large scale business developments that benefit low-income communities. We will be looking to the experience of the Overseas Private Investment Companies when structuring our selection criteria and licensing process. The selection of award recipients by HUD will be based on sound evaluation criteria.

EMPOWERMENT ZONES

Question. Mr. Secretary, we remain concerned over the HUD's inability to provide adequate oversight of empowerment zone funds.

What procedures does the Department have in place to ensure that these funds are being used appropriately and what criteria and benchmarks are in place to measure the success and failure of empowerment zones and enterprise communities?

Answer. HUD has adequate controls to ensure taxpayer funds are spent according to all laws and regulations as provided in the following details. In addition, HUD has a system to adequately measure and assess EZ/EC success.

To ensure compliance with applicable laws and regulations, the Assistant Secretary has increased EZ/EC staff, and assigned a Public Trust Officer (PTO) to monitor and assess the progress of each EZ/EC. The EZ/EC PTO Network works with the EZ/EC Initiative Office at Headquarters to help ensure full compliance with HUD's statutory monitoring responsibilities for Round I and Round II EZs.

To ensure EZ/ECs are making adequate progress in implementing their strategic plans, the EZ/EC Office has instituted a cutting-edge Internet-based performance measurement system called PERMS. HUD requires each EZ/EC to keep track and evaluate all the projects and programs they are implementing to achieve their local strategic plan. The EZ/EC Office developed PERMS to ensure that there is adequate information to measure and assess EZ/EC success. The EZ/EC Office and the PTOs use PERMS to monitor and evaluate the progress of each EZ/EC. Each year the EZ/EC designees use PERMS to submit an annual performance report which identifies progress made in achieving project/program milestones and output measurements, and which tracks the performance of EZ/EC governance boards. PERMS not only cuts down on the paperwork burden facing the EZ/ECs, but provides HUD with a low-cost mechanism for continually monitoring the progress of each EZ/EC. PERMS also provides detailed information on the over 2,500 projects and programs the EZ/ECs are implementing to achieve their strategic plans.

Congress has split oversight of the Urban EZ/EC Initiative between the U.S. Department of Housing and Urban Development, the U.S. Department of Health and Human Services, the States and the 89 Urban Designees. Each plays a different, but important role in ensuring program integrity. By statute, HUD is the designating agency for urban EZ/ECs. HUD is also statutorily responsible for making a periodic determination to ensure each of the 89 designees is making progress. HUD's legal responsibility regarding monitoring derives primarily from section 1391(d)(2) of the Omnibus Budget Reconciliation Act, which provides for the revocation of an EZ's or EC's designation if the Secretary determines, among other things, that a designated EZ or EC has failed "to make progress in achieving the benchmarks set forth in their strategic plan. This provision applies to both Round I and Round II designations, and implies that information must be submitted to and reviewed by HUD in order for the Department to make such determinations. To further implement this responsibility, the Department's regulations at 24 CFR §§ 597.400–403 provide for reporting, performance reviews, validation of designation and revocation of designation under appropriate circumstances. Similar provisions apply to Empowerment Zones designated in Round II pursuant to 24 CFR §§ 58.415–430.

The U.S. Department of Health and Human Services (HHS) has primary oversight responsibility for EZ/EC funds. Section 13761 of the Omnibus Budget Reconciliation Act of 1993 amended title XX of the Social Security Act to provide funds to the States for designated Empowerment Zones and Enterprise Communities pursuant to Round I. Neither the 1993 legislation nor sections 951 and 952 of the Taxpayer Relief Act of 1997, which authorize additional EZ designations by HUD, speak to any additional monitoring or audit responsibilities of HHS. These statutes deal primarily with the designation process, which is HUD's responsibility. Therefore, audit and related responsibilities concerning EZ/EC SSBG funds are subject to the HHS procedures applicable to the parent title XX program. In general, under Title XX, HHS delegates oversight responsibilities for the EZ/EC SSBG funds to the States. The States are responsible for ensuring program integrity just like they are with all Title XX, SSBG funds. The States are responsible for monitoring EZ/EC spending to ensure compliance with EZ/EC legal requirements.

For Round II EZs, Congress has approved $100 million in HUD funding. HUD uses a process similar to the HUD Community Development Block Grant (CDBG) program to distribute the EZ funding. HUD sends its funding to the lead locality (city or county) which in turn may distribute the funding to a non-profit 501c(3) corporation.

OPTIONAL ENTITLEMENT CITIES AND COMMUNITIES

Question. The Department has suggested that the CDBG program should be revised to provide a new class of small cities with entitlement funding. What is the justification for this proposal?

Answer. Last year, the Department considered a proposal to create "Optional Entitlement Communities (OEC)" that would provide consistent Community Development Block Grant funding to meet the needs of smaller urbanized areas. To implement this proposal would require legislative action.

The proposal originated not because of any particular failure by states to meet the priorities of non-entitlement areas in their states. Rather, it came from recognition that some of the larger small communities, below the entitlement threshold, could also greatly benefit from reliable annual funding to carry out a broader range of community development activities to address local priorities characteristic of urbanized areas like the entitlement communities. Most states set the funding priorities and limit the range of eligible community development activities. The proposal follows the same bipartisan concept of devolution that created the Community Development Block Grant program in 1974—that a single block grant allows cities and counties, not the Federal government, to make decisions about the community development projects in their neighborhoods. An annual formula allocation allows communities more flexibility in determining how best to address local community and economic development needs. It provides predictable annual funding. It allows the community flexibility in carrying out multiyear projects.

We are reviewing the numerous comments and issues raised to date. We are consulting with cities, counties, states, their representative interest groups, and other interested parties and, of course, will continue to work with you in the legislative process.

VOUCHER SUCCESS FUND

Question. Mr. Secretary, the Administration is recommending $50 million in fiscal year 2001 for a Voucher Success program. This program is designed to facilitate the use of section 8 assistance by voucher holders, especially since the Administration is beginning to admit that voucher holders are having significant problems in using vouchers as well as finding affordable rental housing. However, this appears to be a double payment since PHAs already receive administrative fees that are intended to compensate PHAs in making the Section 8 program work. What are PHAs doing with their administrative fees?

Answer. Public Housing Authorities (PHA) administer units for the owners, and process subsidies for families in the tenant-based assistance programs. The fees that they receive covers a broad range of ongoing routine program responsibilities, including:

—marketing, accepting applications, maintaining a waiting list, selecting families for admission;
—verifying eligibility, monitoring income mix, providing outreach to owners and fostering owner relations;
—briefing families on (a) the housing search process, (b) housing opportunities, (c) fair market rents, (d) housing quality standards (HQS);
—managing voucher search terms/extensions;
—approving leases;
—determining reasonable rent for each unit leased;
—establishing payment standards, establishing and maintaining utility allowance schedule;
—performing pre-leasing and annual HQS inspections;
—enforcing HQS and performing HQS quality control inspections;
—coordinating portability moves & billing;
—managing the process of family moves within HA jurisdiction;
—reporting family data;
—processing annual and special rent increases for each unit leased;
—terminating assistance and conduct hearings;
—making monthly housing assistance payments; and
—maintaining program/project accounts.

These administrative fees would be both inadequate and inappropriate to respond to the types of issues/concerns for which the Voucher Success Fund is proposed. The Voucher Success Fund is intended to improve lease-up rates in difficult markets, and concomitantly reduce recaptures. By design, the funds would be targeted to communities running sound programs, but still experiencing problems. Some of the activities that are clearly beyond normal program operations, and which would be the focus of the Voucher Success Fund include:

—focused technical assistance to local PHAs or communities to improve program outcomes;
—counseling (including mobility counseling) and security deposit assistance for families using vouchers; and
—intensive outreach programs to encourage landlord participation.

Question. Are these fees too low for PHAs to administer their Section 8 Programs?

Answer. Only in isolated instances have Public Housing Authorities (PHA) found the current administrative fees to be inadequate. This is mostly true in their attempt to fulfill obligations to administer particular unfunded mandates that go beyond usual program operations, i.e., Family Self-Sufficiency, Family Unification, and the Mainstream Housing Opportunities for Persons with Disabilities Programs. For such programs which provide a large influx of vouchers at one time, staff time and resources are stretched beyond capacity.

Question. Please identify all audits and/or studies that review the use of administrative fees by PHAs.

Answer. Only one study of the Public Housing Authority (PHA) administrative fees has been conducted during the last decade, namely, "Section 8 Administrative Fees: A Report to Congress," prepared by the Department's Office of Policy Development and Research in June 1994 (A copy of the Study is enclosed.) Information derived from that Study was used as the basis for the formulation of the Department's policy: "Annual Factors for Determining Public Housing Agency Administrative Fees for the Section 8 Rental Voucher and Rental Certificate Programs," issued January 24, 1995 (copy attached). The policy established in that Rule was used to determine PHA administrative fees until enactment of the Public Housing Reform Act of 1998, which amended Section 8(q) of the 1937 Act.

NATIVE AMERICAN HOUSING BLOCK GRANTS PROGRAM

Question. How well has the Native American Block Grant program met the housing needs of the Native Americans?

Answer. The Indian Housing Block Grant (IHBG), authorized by the Native American Housing Assistance and Self-Determination Act (NAHASDA) was initially implemented in fiscal year 1998. The number of grantees receiving funds since the implementation of NAHASDA represents a substantial increase in the number of clients assisted since the transition from the programs administered under the U.S. Housing Act of 1937 (1937 Act). Under the 1937 Act, assistance was provided to approximately 200 Indian housing authorities (IHAs). In the first year, 368 Indian housing plans (IHPs) (representing 552 tribes) were approved for allocations from the fiscal year 1998 appropriation of $585 million. In fiscal year 1999, 356 IHPs representing 527 tribes were approved for a share of the $610 million appropriation.

The IHBG has also increased the number of eligible activities for the development of new affordable housing activities. The result has been an increase in housing opportunities for many eligible tribal families throughout the country. Activities proposed by tribes in their IHPs include: down payment and other mortgage assistance, revolving loan funds for rehabilitation of housing units, transitional housing, spousal abuse shelters, elderly homes and congregate housing. In many cases IHBG funds have been used effectively to leverage other funds for affordable housing activities.

Training and technical assistance activities have also increased under NAHASDA. The Act required tribes to act either as a direct housing provider or to designate a tribally designated housing entity (TDHE), as opposed to their prior role providing indirect oversight. Consequently, more intensive, hands-on training is needed for Office of Native American Programs (ONAP) staff, tribal officials and TDHE personnel. A staff training plan was developed during the early stages of implementing the Act, and is routinely modified and updated to reflect the training conducted, as well as to reflect new needs that are identified. The Tribal Training and Technical Assistance Center is a vital part of the overall training plan. It is internet-based, and provides a centralized repository for training and technical assistance products, a calendar of upcoming training sessions, and a mechanism for tribes and TDHEs to directly request assistance from ONAP.

A more in-depth review of NAHASDA was provided in the Department's report that was submitted to the House Subcommittee in March 2000. A copy of that report is attached.

The Department remains strongly committed to providing safe, decent and affordable housing for American Indian and Alaska Native families.

ATTACHMENT

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

REPORT TO THE U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON APPROPRIATIONS, INDIAN HOUSING PROGRAM PLAN

PREPARED BY THE OFFICE OF NATIVE AMERICAN PROGRAMS

The following report is respectfully submitted, pursuant to the request contained in House Report 106–286, accompanying the fiscal year 2000 Department of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act.

The objective of this report is to share with the Committee our performance goals and objectives for the Indian housing programs. We also offer detailed background information on these programs to inform you of our recent successes, our challenges and how these programs are operating. Taken together, this information will provide the Committee with a better understanding of how we will achieve our goals and objectives.

Within the Department of Housing and Urban Development (HUD), the Office of Native American Programs (ONAP) carries principal responsibility for development, delivery and monitoring of programs for Native Americans. The authorizing statute for ONAP's primary programs is contained in the Native American Housing Assistance and Self-Determination Act of 1996 (NAHASDA).

The performance goals for HUD and ONAP are as follows:

—to increase the availability of decent, safe and affordable housing in all Native American communities

—to increase homeownership opportunities in Native American communities by increasing the number of Section 184 guaranteed mortgage loans

—to increase the availability of affordable rental housing to low-income Native American families residing within an American Indian and Alaska Native area
—to create additional housing opportunities by increasing the technical expertise of Indian tribes and Tribally Designated Housing Entities (TDHEs)
—to promote self-sufficiency and asset development by poor and disadvantaged Native American families and individuals
—to enhance the development of affordable housing through the use of successful, innovative models in the Title VI program
—to increase access to private capital
—to further economic growth on Indian reservations and other Indian areas
—to contribute to the overall decline in housing discrimination from 1989 levels

The performance objectives which have been established are reflective of HUD's Business and Operating Plan and our Annual Performance Plan. They are the following:

—increase the number of Native American families served by the Indian Housing Block Grant program by 3 percent in fiscal year 2001 from the baseline established in fiscal year 2000
—provide training sessions to tribes, TDHEs and financial institutions covering the Section 184 and other mortgage loan programs, in order to increase homeownership opportunities
—provide Section 504 training to a minimum of 20 percent of NAHASDA grant recipients in order to help reduce discrimination levels
—encourage the investment and participation of traditional financial institutions that have not served Indian reservations and other Native American areas

BACKGROUND INFORMATION ON HUD'S INDIAN PROGRAMS

The Indian Housing Block Grant Program

The Office of Native American Programs (ONAP) has successfully completed its second year of reviewing the Indian Housing Plans (IHP) submitted by participants in the Indian Housing Block Grant (IHBG) Program, as required by section 103 of the Native American Housing Assistance and Self-Determination Act of 1996 (NAHASDA). Figure 1 illustrates client and funding levels for fiscal year 1998 and fiscal year 1999. This represents a substantial increase in the number of clients that ONAP has assisted since the transition from the programs administered under the U.S. Housing Act of 1937 (1937 Act). Under the 1937 Act, ONAP provided assistance to approximately 200 Indian housing authorities.

FIGURE 1

[Funds in millions of dollars]

	No. of plans submitted	No. of tribes represented	Funds allocated
Fiscal year:			
1998	368	552	$585
1999	356	527	610

NAHASDA has provided tribes with the ability to develop new affordable housing activities that were not eligible under the 1937 Act. The result has been an increase in housing opportunities for many eligible tribal families throughout the country. Examples of the activities proposed by tribes in the IHPs include: downpayment and other mortgage assistance, revolving loans funds for rehabilitation of housing units, transitional housing, spousal abuse shelters, elderly homes and congregate housing. NAHASDA has been used in many cases to leverage funds for affordable housing.

In addition to the review of plans, we have continued to administer the IHBG formula developed by the Negotiated Rulemaking Committee. This included the successful completion of challenges and corrections to the NAHASDA funding formula. In fiscal year 1999, we enlisted the assistance of a contractor to assist the Department and our recipients in this effort. These challenges and corrections are submitted for the purpose of correcting the data used in developing the formula allocation for each tribe. See Figure 2.

FIGURE 2.—*Indian Housing Block Grant*

Fiscal year:	*No. of formula challenges*
1998	120
1999	137

We also have developed a "Toll Free" hotline so that tribes and tribally designated housing entities can receive immediate assistance with formula allocation questions and problems.

ONAP will be convening a work group this year to re-examine the formula, pursuant to the requirements contained in 24 CFR 1000.306. This regulation states that the IHBG formula can be modified by developing a set of measurable and verifiable data directly related to Indian and Alaska Native housing needs; determining if NAHASDA units should be included under Formula Current Assisted Stock (FCAS) or other changes that may be needed with respect to funding under the FCAS component of the formula; and/or, reducing the Section 8 units by the same percentage that the current assisted rental stock has diminished since September 30, 1999. The goal of the work group will be to determine if the formula should be modified as a result of the data uncovered.

Title VI: Federal Guarantees for Financing for Tribal Housing Activities

Title VI of NAHASDA authorizes HUD to guarantee notes or other obligations issued by Indian tribes or TDHEs for the purpose of financing affordable housing activities as set forth in Section 202 of NAHASDA. Indian tribes, or their TDHEs, leverage IHBG funds to secure financial obligations to a maximum of five times their annual grant allocation. Current and future IHBG funds are pledged as security to the repayment of the Federally-guaranteed financial obligation. In its third year of funding, ONAP issued Preliminary Letters of Acceptance to seven potential borrowers representing potential loan commitments of $34,155,000. With continued training, technical assistance and sharing of model loans from those first funded, ONAP expects continued growth of the program.

Section 184 Indian Home Loan Guarantee Program

The Indian Home Loan Guarantee 184 Program was created under Section 184 of the Housing and Community Development Act of 1992, as amended by Title VII of the Native American Housing Assistance and Self-Determination Act of 1996 (NAHASDA). The Section 184 program gives Native Americans access to sources of private mortgage financing by providing loan guarantees to lenders. Section 184 covers one-to-four family homes located in an Indian or Alaska Native area where the land may be tribal trust, allotted individual trust or fee simple land.

Native American and Alaska Native families, individuals, Indian Tribes or Indian Housing Authorities (including TDHEs) may obtain Section 184 financing in order to purchase an existing home, construct or rehabilitate a home within an Indian area. In the event of a foreclosure, only these eligible borrowers may purchase the home from HUD.

SECTION 184 ACTIVITY TO DATE FROM PROGRAM IMPLEMENTATION IN 1994 TO JANUARY 31, 2000

Ownership Type	No. of Loans	Amount of Loans
Fee Simple	433	$46,966,523
Tribal Trust	185	14,737,222
Allotted Trust	13	1,093,011
Totals	631	62,796,756

TRAINING AND TECHNICAL ASSISTANCE SUCCESSES

The passage of NAHASDA and its implementation through the program regulations developed by the Negotiated Rulemaking Committee challenged tribes and ONAP staff to create a new atmosphere of consultation and coordination. Asking a tribe to adopt procedures to become the direct housing provider was vastly different than their prior role as an indirect oversight entity. More intensive, hands-on training may be needed for ONAP, tribes and their housing entities to meet those chal-

lenges along with the skillful use of all technological tools to reduce costs and maximize the utilization of Federal funds.

As part of the ONAP reorganization, a Training and Technical Assistance Committee was formed consisting of a representative from each ONAP field and Headquarters offices. One of the first priorities of the committee was to develop a staff training plan. In the past two years the training plan has been modified and updated as training has occurred and new needs are identified. The committee conducted a staff survey in December 1999 and has continued to receive input from the local offices.

In order to meet the committee's mission of achieving the most effective and efficient use of training resources, many of the training courses are consolidated sessions for grant recipients and ONAP staff. In many instances, ONAP uses outside contractors to develop and conduct the training sessions; therefore, the annual procurement plan is prepared in conjunction with the training plan.

In the past year, the following training sessions have been held for grantees, ONAP staff, financial institutions or all of these participants:

—Indian Housing Plan preparation and submission
—Environmental Review requirements
—Grants Monitoring Business Processes
—NAHASDA Grant Requirements
—Indian Community Development Block Grant
—Internal Controls and the Audit Process
—Section 184 Loan Guarantee Program
—Homeownership Counseling
—Homeownership Summit Seminars
—Low-income Housing Tax Credit Workshops
—Policy Development Workshops
—Implementation Skills for Boys and Girls Clubs
—Boys and Girls Club Executive Directors Training
—Crime Prevention and Drug Elimination Conference

The technical assistance plan developed by the committee provides for periodic assessment of needs, local Area ONAP involvement, evaluation of requests and short- and long-term evaluation. Based on an analysis of technical assistance requests, workshops providing hands-on technical assistance for small groups of housing or tribal representatives are scheduled. The workshop environment allows for a more cost effective method of delivering technical assistance while providing one-on-one assistance.

A Tribal Technical Assistance and Training (TTAT) Center has been established on the Internet to provide a central location for tribes and TDHEs to request technical assistance in program planning, development, and management. The TTAT Center maintains a training calendar and provides training and technical assistance products.

Under the Drug Elimination technical assistance program, training manuals and newsletters have been developed to support the Boys and Girls Club Initiative. Five guidebooks have been developed for the Youth Development and Community Leadership program. Under the Community Anti-Crime in Indian Country initiative, needs assessments and site visits have been conducted by our contractor.

During fiscal year 1998 and fiscal year 1999, ONAP conducted over 13 regional training and technical assistance sessions for recipients on submission of IHPs. Additionally, we completed numerous sessions with ONAP staff, instructing them on how to review these IHPs in order to ensure national consistency across the program. ONAP developed a National Review Committee, comprised of program staff from throughout the country, to assist in the review of IHPs during these first two years of NAHASDA implementation. The purpose of the NRC was to ensure consistency in the interpretation of NAHASDA and its implementing regulations.

In fiscal year 2000, we continue to work on improving the IHP review requirements and open further channels of communication between our staff and our grant recipients. Staff training was held in December of 1999 with follow-up training provided in January of 2000. Training is also scheduled for the third or fourth quarter of this year. Sessions on IHP and NAHASDA requirements are also planned for grant recipients. We continually work with staff to ensure that the 60-day statutory deadline for IHP review is met.

In order to successfully implement the new Title VI program, HUD published a Notice of Funds Availability (NOFA) to provide "capacity-building" (i.e. the transferring of skills and knowledge) to potential borrowers. The purpose of the NOFA was to solicit a qualified technical assistance to: (1) strengthen the economic feasibility of projects guaranteed under Title VI of NAHASDA; (2) directly enhance the security of guaranteed loans; (3) finance affordable housing activities and related

projects that will provide near-term results; (4) demonstrate economic benefits such as homeownership opportunities, increase housing availability, housing accessibility and visibility, and job creation related to the approved project; and (5) attain Indian Housing Plan goals and objectives.

Thus far, the contractor selected has provided training at approximately 20 tribal and association meetings and developed an assessment program that screens potential borrowers. The multi-step assessment program includes a telephone assessment to determine initial qualification and needs, followed by an on-site review to determine the extent of technical assistance that may be required. This is accomplished by reviewing records, audits, resident accounts, maintenance schedules, work orders and other housing activities. Data is assembled and a Technical Assistance Plan is custom designed to meet the needs of the borrower. The Technical Assistance Plan is then submitted to ONAP for approval and Capacity-Building grant funds are reserved. Three Technical Assistance Plans have been approved by ONAP and another is currently under ONAP review.

Outreach and training has continued under the Section 184 home loan guarantee program. A significant change took place in fiscal year 1999 in the delivery of this training, as a result of the One-Stop Mortgage Center Initiative. In August 1998, President Clinton held an Economic Development Summit to focus on Indian country issues. One of the by-products of the Summit was the Initiative, co-chaired by HUD and the Treasury Department. The goal of the joint committee was to increase homeownership opportunities in Indian country through streamlining the mortgage loan process.

HUD and Treasury were requested to put together working groups to identify the barriers to mortgage lending in Indian country, and develop solutions to those barriers. In the course of this process many participants identified the need for education about available loan products sponsored by Federal agencies. The result was inter-agency training sessions, sponsored by ONAP, which cover not only the Section 184 program, but also loan programs sponsored by the U.S. Department of Agriculture and Veterans Affairs. Speakers from the Bureau of Indian Affairs also participate in order to train attendees on land issues. Three inter-agency trainings were held in fiscal year 1999 and four have been planned for fiscal year 2000. ONAP staff continue to participate in conferences around the country, to promote the Section 184 program.

ONAP has also developed many technical assistance products which have been made available to grant recipients on the Internet or through distribution of CD–ROMs. Some of these products include:

The Side-by-Side Guidebook.—Allows the user to easily refer to NAHASDA along with the applicable program regulation(s). The Guidebook also includes all regulations and laws included or cross-referenced in NAHASDA or in 24 CFR Part 1000.

The Tribal Legal Code Project.—An outline and illustrative guide for drafting tribal-specific housing codes, including representative examples of land use, building, and zoning codes. The project utilized existing tribal codes and identified best practices.

The ONAP Online Training Modules.—A web-based training tool that allows users to learn whenever they want, at their own pace. The online training currently includes basic level modules on housing finance, procurement, homeownership, financial management, construction management, and property management. Additional topics and intermediate and advanced modules will follow.

The NAHASDA Development Model Series.—Models crafted to help tribes and TDHEs design eligible programs using NAHASDA funds. Each model includes, where appropriate, an outline of new regulations and detailed guidance on program design, implementation strategies and effective approaches.

The Guide to Creating a Nonprofit Homeownership Entity.—A resource guide for launching a nonprofit with the mission of promoting homeownership opportunities. The guide leads the user through the planning stages, the legal creation of an entity, the application process for Internal Revenue Service 501(c)(3) status, the development of the organization, and program operations.

The HUD ONAP Community Builders have been actively involved in the provision of direct technical assistance to tribes and TDHEs in all six Area Offices. Their regular activities include site visits, responding to telephone requests for assistance or information, preparation of explanatory materials on Federal programs, and conducting workshops and training sessions. ONAP Community Builders carried out some of the sessions noted above and in addition provided the following technical assistance sessions:

—*Muckleshoot Tribal Housing Authority*.—Considered different financing alternatives including developing their own lending firm.

—*Lower Elwha, Jamestown Klallarn and Makah Tribes*.—Provided information and training on Section 184, tribal programs, and tribal employment.
—*Port Madison Tribe*.—Explained Title VI, purchase of fee simple land, downpayment assistance and the purchase of HUD Acquired Properties.
—*Yakama and Port Gamble S'Kallam, Tribes*.—Provided examples and models of homeownership counseling programs.
—*Coquille Tribe, the Coos, Lower Umqua, & Siuslaw Confederation of Tribes, the Silitz Tribe and the Grand Ronde Tribe*.—Providing training on Section 184, Title VI, and other financing options.
—*Lummi, Tulalip, Quinault and Puyallup Tribes*.—Gave training and materials on the Title VI program.
—*Santa Clara Pueblo Housing Authority*.—Explored establishing homeownership programs and utilization of the Title VI program.
—*Jemez Housing Authority*.—Provided examples of homeownership and rehabilitation programs for the elderly.
—*Santo Domingo Housing Authority*.—Provided training on various homeownership programs, Title VI and low-income housing tax credit project.

TRAINING AND TECHNICAL ASSISTANCE GOALS AND OBJECTIVES FOR FISCAL YEAR 2000

Objectives fully or partially completed:
—Provide job-specific training to 100 percent of the ONAP staff.
  —Job-specific training was provided to over 95 percent of the ONAP staff at the first ever all-staff training in December 1999.
—Workshops on Low-income Housing Tax Credits, Special Needs Assessment, Indian Housing Plans, Policy Development, Project Implementation for Rehabilitation and Internal Controls and Self-Monitoring, have been held in October and December 1999 and January and February 2000 in three locations.
—Issue at least six Dream Catchers; a newsletter offering up-to-date program information. The last issue in this on-going series was issued December 1999.
Training and Technical Assistance projects being finalized:
—Hold training sessions in each region for IHBG recipients and ONAP staff on a minimum of five topics.
—Develop additional modules for the ONAP Online Training.
—Develop and distribute additional technical assistance products.
—Maintain quality Internet sites (Code Talk) as a resource for tribes.
—Conduct workshops on at least eight different topics in at least six different locations for IHBG recipients.

ONAP TECHNOLOGY HIGHLIGHTS

ONAP utilizes technology to better serve its clients, administer its programs, and manage its most important corporate asset—knowledge capital. Since 1997, ONAP has provided its clients and the general public with improved Internet access to the latest reference documentation, frequently asked questions, collaboration forums, and grant program assistance information. Additionally, annual plans and reports can be submitted via the Internet by grant recipients directly to ONAP staff for review, tracking, and approval as part of an efficient Lotus Notes workflow system. This system also allows ONAP to track work-load by assigning reviewers to plans and reports, as well as determining benchmarks for process improvements by capturing specific metrics such as how long it takes to review plans and reports.

ONAP's success in providing information to our clients through the use of the internet is proven by examining the number of "hits" on our various web pages during the months of December 1999 and January 2000.

ONAP Web Site Tracking

[December 1999 and January 2000]

	No. of "hits" to web page
Web-based Training	6,083
Planet Youth	32,600
Tribal Consultation Information	1,656
E-Library	2,665

The Planet Youth web site is designed for and primarily used by Native American youth. It is the third most popular site among ONAP's various web sites. Additionally, ONAP's web pages have proven to be a vital and ready source of information. Program information and publications such as the Dream Catcher newsletter are frequently downloaded, according to tracking information.

ONAP established a Knowledge Management Committee (KMC) focused on standardizing office processes, increasing staff efficiency and effectiveness, sharing knowledge, working smarter, and helping ONAP achieve its mission and objectives. The KMC also manages ONAP's Electronic Library (eLibrary), which is our Front Page for weekly messages from the Deputy Assistant Secretary, contact information, calendar events, meeting minutes, best practices, and reference materials. The eLibrary also allows for electronic dialogue between geographically dispersed ONAP staff members through the use of discussion databases.

During fiscal year 2000, ONAP will expand the use of the Internet and other leading-edge technologies to continue to lead HUD and the Federal Government with Electronic Business. They will continue their commitment to grant recipient technology enablement through a new initiative designed specifically to help the Native American community obtain Internet access. ONAP will provide hands-on, on-site support to these groups. The benefits of this initiative include expediting the grant allocation process by allowing ONAP staff to review the plans and reports on-line. Increasing on-line submissions will enable ONAP staff to spend more time assisting grant recipients in developing successful housing programs. Additionally, the Recipient Technological Enablement initiative helps to shrink the digital divide by providing Internet access and skills to geographically remote groups who might otherwise be left behind in the new technology-based economy.

ONAP will continue to promote the KMC and eLibrary. Our plans are to reevaluate the roles of the KMC representatives so that they have more time and incentive to contribute to its success. An active KMC and a well-utilized eLibrary will help reduce paper transactions and rework as well as increase ONAPs responsiveness to clients. This initiative also supports ONAP's Virtual Office goals by allowing ONAP staff located across the country to collaborate, sharing data and ideas.

During fiscal year 2000, ONAP will also begin development of the Native American Economic Development Access Center (NAEDAC), as directed by President Clinton. The NAEDAC will provide tribes, Indian-owned businesses, the private sector, and non-profit organizations easy access to information on a wide range of Federal economic development programs and initiatives. The NAEDAC will initially consist of a toll-free telephone number answered by ONAP staff, who will direct callers to sources of obtain information on federal resources for economic development. Ultimately, the Internet and other technologies will be used for the Native American community to conduct their own research through a single access point on the Internet.

MONITORING AND OVERSIGHT OF INDIAN PROGRAMS

During fiscal year 1999, ONAP created a team of managers, staff, and subject-matter experts to develop a business process for the evaluation of grantee performance. The outcome of this effort is a risk-based monitoring effort wherein the recipients with the highest potential for not accomplishing their objectives receive the greatest attention, such as closer oversight and access to available technical assistance, from the Department. The ONAP recognizes the benefits of reviewing all recipients on a regular basis to identify best practices, so that they may be shared with other program participants. In addition to regular monitoring of the poorer performers, an objective has been established to visit at least 20 percent of all program participants each year, so that all recipients will be monitored not less frequently than every five years. During fiscal year 2000, 116 recipients have been scheduled for monitoring with 96 planned for on-site review. This level of effort reflects review of approximately 20 percent of all active recipients.

ONAP will extend its use of the Internet during fiscal year 2000 to provide the public with access to the schedule of upcoming monitoring visits, copies of final monitoring reports on recipient performance, and the guidelines and tools used by ONAP in its monitoring efforts. The planned monitoring visit schedule is currently posted on the "CODETALK" website and is updated monthly. This information will assist grant recipients in preparing for HUD monitoring of its' programs and provide relevant information on what is or is not working for other tribes.

The business process development team created a guidebook to provide instruction to HUD staff in monitoring requirements and to improve consistency in the application of program requirements among all ONAP offices. During fiscal year 2000, ONAP plans to refine and expand the contents of the guidebook to incorporate knowledge obtained during the monitoring process. The initial guidebook, along with any improvements, will be made available to tribes and tribally designated housing entities for their information and use via the electronic medium.

During fiscal year 2000, ONAP will constantly review and refine its monitoring processes and procedures to improve the efficiency and effectiveness of its oversight

functions. This will include, as mentioned in the previous paragraph, regular updates to its internal guidance (self-evaluation), assessment of its performance by outside experts to solicit recommendations for streamlining and other improvements, assessing the availability for out-sourcing monitoring elements such as analysis of physical condition of housing stock, financial reviews of recipients and incorporating greater use of technology in monitoring.

ONAP continues to monitor the performance of lenders and individual loan performance in the Section 184 program. Loss mitigation options are strongly encouraged for servicing mortgagees. When quality control reviews of guaranteed loans reveal potential lender problems, on-site monitoring reviews will be scheduled.

CONCLUSIONS

HUD and the Office of Native American Programs, remains committed to providing safe, decent and affordable housing for Native Americans and Alaska Natives. In order to accomplish our goals and objectives, we will maintain a dynamic program of technical assistance and training. An aggressive monitoring program will assure quality program delivery.

Question. How does HUD measure the success of this program under the Results Act?

Answer. The fiscal year 2001 performance goal under Government Performance Results Act (GPRA) for the Indian Housing Block Grant (IHBG) is to increase the number of Native American families served by 3 percent over the baseline that will be established in fiscal year 2000. The Department will accomplish this by analyzing the Annual Performance Reports (APRs) which are required to be submitted by grant recipients pursuant to sections 403(b) and 404(b) of NAHASDA and its implementing regulations at 24 CFR 1000.512–521. The Department's Office of Native American Programs (ONAP) staff reviews the APRs to determine if the grantee was successful in meeting its stated Indian Housing Program (IHP) goals. Staff also monitor each grantee's performance and track data submission through on- and off-site monitoring.

Question. What significant reforms need to be made to this program to ensure its success?

Answer. The Office of Native American Programs (ONAP) has been deeply involved in consulting with its clients to reach consensus on how to improve program operations and delivery. A number of issues have been identified for further discussion, including:

—reviewing the established allocation formula to ensure that it meets tribal needs;

—expanding Native American Housing Assistance and Self Determination Act's (NAHASDA) six eligible affordable housing activities to include comprehensive planning activities, housing services, and certain infrastructure needs when the low-income families are residents of housing not developed under NAHASDA (these and similar activities are currently prohibited by statute); and

—resolving problems associated with reaching cooperative agreements with local jurisdictions and the tax-exempt status of housing units developed with NAHASDA funds.

PUBLIC HOUSING OPERATING FUND

Question. What is the status of the rule making for establishing a new operating subsidy formula and when will this new formula be ready for implementation?

Answer. Regulatory negotiations for establishing a new operating subsidy formula were completed on March 8, 2000, with the adoption by consensus of preamble and regulatory language drafted by the established Negotiated Rulemaking Committee. Following internal, OMB, and Congressional Committee reviews, the draft material is expected to be issued as a proposed rule later this month. The Department will consider the public comments received on the proposed rule and, per the consensus agreement, issue an interim rule that would govern the determination of funding distributions to Public Housing Authorities (PHA) under the Operating Fund, until a final rule, reflecting the results of a Congressionally requested public housing cost study, is developed and published. The interim rule will first be effective for PHAs with fiscal years beginning on or after January 1, 2001.

PUBLIC HOUSING CAPITAL FUND

Question. What is the current estimate of unmet capital needs for the entire stock of public housing?

Answer. A major study conducted by Abt Associates for HUD, completed in March 2000, concluded that the backlog was approximately $23 billion in June 1998. The

Study, which also concluded that the requirements have an annual accrual of $2.1 billion, was based on physical inspections of 684 developments with 229,973 units at 219 housing authorities. A copy of the referenced Study is enclosed.

[CLERK'S NOTE: A copy of "Capital Needs of the Public Housing Stock in 1998", formula capital study, can be obtained by contacting the U.S. Department of Housing and Urban Development.]

Question. Should these capital needs be considered as a priority among HUD programs?

Answer. Yes. Public housing developments are a vital source of housing for low-income families. Vast improvements have been achieved in rehabilitating and integrating public housing into the fabric of the community through HOPE VI and Public Housing Capital Fund appropriations. To forestall and reverse the deterioration of the aging, existing stock, including failing infrastructure, and the consequent negative impact on communities, continued funding at significant levels for both programs is critical.

Question. Does HUD have a long-term plan for addressing these capital needs?

Answer. The Department has a three pronged approach for addressing the capital needs as follows: (1) Annual physical inspections are conducted by the Real Estate Assessment Center (REAC) to document and provide a current assessment of the conditions of all public housing developments; (2) Based on the annual assessment, Public Housing Authorities (PHA) develop long-range strategies in order to target capital fund resources and additional assessments of capital needs to correct those deficiencies through renovation of viable developments and/or demolition of non-viable developments; and (3) HOPE VI funds are used in select cases, where the PHA, the local community, the City, and private entities are able to form a partnership for a comprehensive plan to revitalize a community, and capital funds otherwise would be inadequate.

Question. Has HUD conducted a cost benefit analysis of what is the appropriate level of funds needed to meet public housing capital needs over the next 10 years?

Answer. The 1998 Abt Study, commissioned by the Department, documented a modernization backlog of approximately $23 billion, and an annual accrual of $2.1 billion. The results of this Study (copy provided with previous answer) can be used as a guide for the appropriators.

SECTION 202 ELDERLY HOUSING CONVERSION TO ASSISTED LIVING

Question. Mr. Secretary, the administration is proposing $50 million for the conversion of section 202 housing to assisted living units. What is the status of this new initiative and what is the nation-wide need for this type of housing?

Answer. The Notice of Funding Availability (NOFA), announcing fiscal year 2000 funds, was published in the Federal Register on March 17, 2000 and applications are due July 17, 2000. The number of Section 202 elderly residents 85 years and older are increasing rapidly. As these residents continue to age in place, they are becoming frailer and consequently need more accessibility features and more supportive services in order to remain independent and not be prematurely displaced to nursing homes. In most cases, nursing homes provide the primary option for the very low-income frail elderly since most assisted living facility are not affordable. As we have been informed by the industry, the $50 million for converting existing Section 202 projects to assisted living facilities allows their residents to remain in place and provides their frail elderly residents with an affordable option to nursing home placement.

SECTION 811 HOUSING FOR PERSONS WITH DISABILITIES

Question. Mr. Secretary, the Department continues to propose increased funding annually for the Housing for Persons with AIDS housing program (HOPWA) while Section 811 Housing for Persons with Disabilities has primarily received flat funding under recent Administration budgets?

Answer. The Department has also proposed an increase in funding for the Section 811 program since fiscal year 1999. In fiscal years 1999, 2000, and 2001, the Department proposed $174 million, $194 million, and $210 million respectively. The Department has proposed an increase in the HOPWA program to help address growing needs and provide support for additional communities that are projected to become eligible for the formula. For the Section 811 program, the Department has proposed an increase in funding to further address the housing needs of persons with disabilities who, as a population, have the worst case housing needs.

In addition to the increased funding the Department is proposing to expand the "earned income disregard" that is now applicable only to HUD's public housing program to the calculation of income for persons with disabilities to many of the pro-

grams at HUD. HUD has the authority to implement the "earned income disregard" immediately for the following four programs: HOME, Housing Choice Voucher Program, HOPWA, and Supporting Housing for the Homeless. For other programs at HUD, statutory language change will be required. The language is being drafted by the Department at this time. The earned income disregard will assist persons with disabilities in obtaining and retaining employment, which obtaining and retaining employment, which is an important step toward economic self-sufficiency.

Question. In fact, HOPWA funding receives more annual HUD housing funding than Section 811 housing despite the fact that persons with AIDS are housed in Section 811 housing?

Answer. Since 1992, the HOPWA program has been the Federal Government's primary targeted response to the pressing housing needs of low income persons who are living with HIV/AIDS and their families. Although persons with HIV/AIDS are eligible for Section 811 housing, it is estimated that only 800 of the more than 16,000 housing units funded through the Section 811 program over the past 10 years are for this population. Therefore, the funding that the HOPWA program has received over the years which covers the cost of a wide array of activities such as housing assistance, supportive services and program planning and development, is necessary to address the often unique and diverse housing needs of a growing population of persons with HIV/AIDS.

Question. How do you explain the difference in the funding priorities by the Administration between these programs?

Answer. The HOPWA program and the Section 811 program are different in many respects. The Section 811 program provides funding for the development of new permanent housing for persons with disabilities. The HOPWA program is responding to a national epidemic. Although the HOPWA program serves one population of persons with disabilities and its primary focus is on housing assistance, the assistance is quite different than what is provided through Section 811.

Under Section 811, the majority of the assistance is project-based. Of the HOPWA funds used for rental assistance (78 percent of total funding), 84 units supported through 57 percent of the HOPWA funds are for tenant-based rental assistance and short-term rent, mortgage and utilities payments to prevent homelessness. These funds may be used to support residents in their existing housing which enables them to maintain their independence. Only 16 percent of the units, supported with 43 percent of rental assistance funds are for facility-based forms of housing assistance. The remaining 22 percent total of HOPWA funds are used for supportive services. No Section 811 money can be used for supportive services. The above is indicative of the fact that the large population of persons with HIV/AIDS in this country has needs that, in most cases, are not well served through the project-based Section 811 program. Funding for HOPWA is essentially based on caseload levels and again represents the existence of a national epidemic and the basic fact that the number of persons living with AIDS continues to increase. In addition, the Department has in recent years requested additional Section 811 funding, reflecting growing demand for this program as well.

Question. Should these programs be merged?

Answer. No, the programs should not be merged because, as described in the answer to the previous question, the two programs are very different with respect to the types of activities that can be implemented. In addition, eligible applicants for the two programs are different. Under the Section 811 program, eligible applicants are nonprofit organizations with a Section 501(c)(3) tax exemption. Under Housing Opportunities for People With Aids (HOPWA), grants are provided by formula allocations for 90 percent of the appropriation to States and metropolitan areas with the largest number of cases and incidence of AIDS, and for 10 percent of the appropriation, by competitive selection of projects proposed by State and local governments and nonprofit organizations. Both programs have very different legal structures. Under HOPWA, funding is provided in the form of a grant that must be expended within three years or the funding will be deobligated. A grant agreement is used to obligate the funds. Under 811, however, funding is in the form of capital advances and project rental assistance funds for the development and operation of the projects. The project must operate for at least 40 years; otherwise the Owner must repay a prorated share of the capital advance to HUD. There is no grant agreement under Section 811. Instead, there is a capital advance agreement and a mortgage note, among other legal documents.

LEAD-BASED PAINT HAZARD REDUCTION

Question. Mr. Secretary, the Administration is proposing a significant increase in the Lead-Based Paint Hazard Reduction program from $80 million in fiscal year

2000 to $120 million in fiscal year 2001. What activities will these funds be used for? In addition, I understand that HUD funding of remediation far exceeds private sector costs for similar activities.

Answer. Of the proposed $40 million increase, $30 million will be used to increase funding for states and local governments to control lead-based paint hazards in privately owned low-income dwellings where the risk of childhood lead poisoning is greatest. For the past several years, HUD has received grant requests totaling over $200 million each year; most of these applications demonstrate very real need and capacity. The need for funding has consistently exceeded the availability of funds. Without a significant increase in funding, low-income children will continue to be unnecessarily exposed to lead paint hazards.

Eligible activities under the grant program include lead-based paint inspections, risk assessments, correction of detected hazards, post-abatement clearance testing (to ensure the work was done properly and the property is safe to occupy), blood lead testing (if not reimbursable from Medicaid or another source), public education to provide parents with the information they need to protect their children and to encourage landlords and other property owners to enroll in the program, relocation expenses (to ensure children are not exposed to hazards during the work), and administration (limited to 10 percent of the award). Many local jurisdictions are able to leverage private sector funds or set up revolving loan programs with the Federal funding. The proposed increase in funding is part of a governmentwide strategy to eliminate childhood lead paint poisoning by the year 2010 (this strategy report was sent to Congress in March 2000).

Grants are currently active in over 200 cities, but without increased funding, many jurisdictions will not have the resources needed to eliminate this disease. Funds are also used to provide technical assistance to grantees and conduct research to promote innovation and drive down hazard detection and abatement costs. Recent data from a scientific evaluation of the grant program show that blood lead levels have declined by approximately 25 percent in children living for at least 1 year in abated housing and that dust lead levels have declined by 66 percent over a 3-year period. Updates on the evaluation have been provided in reports to Congress each year for the past several years, with a major report expected in 2001.

The remaining $10 million will be used to enforce lead paint regulations and to provide compliance assistance. At the Federal level, HUD has new responsibility to enforce both the lead paint disclosure regulation and a new regulation that consolidates, streamlines and modernizes lead paint regulations for all Federally assisted housing. The latter will take effect on September 15, 2000. Without increased resources, HUD will be unable to provide the necessary training, technical assistance and enforcement oversight needed to ensure compliance and to ensure that Federal resources are not being used to subsidize housing that poisons children. The fiscal year 2000 budget provided $70 million for the lead paint grant program, technical assistance and research and $10 million for the Healthy Homes Initiative.

See next question for details on HUD versus private sector costs.

Question. Please provide a comparison of HUD costs as opposed to private sector costs for remediation. Explain any differences in costs?

Answer. There are no data on privately funded abatement costs. As a practical matter, most hazard control actions are performed under orders of local health departments investigating cases of poisoned children, or publicly funded projects through federal state and local funding. HUD estimates the average costs of interim controls to be approximately $2,500 per unit and $9,000 for permanent abatement. However, since most homes do not have lead paint hazards and, therefore, will not require treatment, the average cost per unit of the regulation is only $196.00. The costs for individual dwellings can vary widely, due to differences in size, number and type of surfaces with lead hazards, and condition. The costs of lead hazard control are best detailed in the Economic Analysis for HUD's lead hazard control regulation, available upon request or at www.hud.gov/lea. The Economic Analysis relies on the cost data collected from the evaluation of the grant program, as well as interviews with private lead hazard control contractors. The analysis shows that the cost of complying with the new HUD lead paint regulation for federally-assisted housing is $235 million. The cost of not implementing the regulation (i.e. the benefit) is $1.1 billion due to increased medical care, special education, and reduced lifetime earnings (due to reduced IQ).

Question. Please identify the targets and benchmarks for this program under the Results Act.

Answer. Performance indicators are contained in the Department's Strategic Objective (1.3.5) of the Annual Performance Plan. They include the number of units made lead-safe, the percent reduction in dust lead levels in homes treated under the grant program, the number of cooperative agreements completed under the Healthy

Homes Initiative, and the reduction in children's blood lead levels. The target number of units treated under the grant program for fiscal year 1999 was 6,000 units and the actual number was 7,471. The overall cumulative number of units treated is currently about 25,000 (which does not include the units treated as a result of public education undertaken by grantees). The target percent reduction in dust lead levels for fiscal year 1999 was 25 percent compared to baseline levels before abatement. Actual performance was 64 percent. The fiscal year 1999 target for the Healthy Homes Initiative was 8 awards; the actual performance was 11 awards. The fiscal year 1999 target reduction in blood lead levels for children living for at least 1 year in abated housing was 20 percent. The actual reduction was 26 percent. Blood lead levels decline more slowly than dust lead levels due to body stores of lead in the bone. National blood lead levels should be available from the Centers for Disease Control and Prevention in 2003 in the next National Health and Nutrition Examination Survey.

Question. How does HUD measure the success of this program?

Answer. The two chief outcome measures are blood lead levels and dust lead levels. Population blood lead levels are measured through Center for Disease Control's (CDC) National Health and Nutrition Examination Survey and dust lead levels are measured through the on-going HUD Evaluation of the Lead Hazard Control Grant Program. The report of the President's Task Force on Environmental Health Risks and Safety Risks to Children contains new projections of the number of children with elevated blood lead levels and the number of housing units at risk of lead paint hazards. We estimate that there are about 250,000 low-income children with lead poisoning living in pre-1960 housing units. The last estimate from CDC was about 800,000 children (from 1991–1994). While this represents enormous progress (due in part to the HUD lead paint grant program) it is noteworthy that the prevalence of this disease is still very large among certain populations. Among low-income children living in older housing, the prevalence is 16 percent (compared to 4.4 percent for all children). Among African-American children in older housing, the prevalence is 21 percent. Unfortunately, childhood lead poisoning continues as one of the major childhood environmental diseases. The report estimates that by the year 2010, unless further actions are taken, about 135,000 children annually will be poisoned. The proposed expansion of the grant program and implementation of the new HUD regulation is designed to eliminate this problem over the coming decade. HUD will also complete a new national survey of the prevalence of lead paint hazards in the U.S. housing stock by December 2000. This will enable HUD to measure progress in making housing lead-safe.

Question. What is HUD's role in remediation efforts in the private sector?

Answer. HUD encourages its grantees to leverage private sector funding to augment the Federal resources available. We also play an important role in setting standards to create a level, competitive playing field that promotes innovation and new technology in the lead hazard control industry. For example, HUD produces Performance Characteristics Sheets for XRF lead paint analyzers, which has helped fuel a new generation of quicker, more accurate and less costly methods of lead paint analysis. HUD also enforces the lead paint disclosure regulation, which enables new homebuyers to obtain a 10-day opportunity to have a lead paint inspection or risk assessment performed. If hazards are identified, their correction can be financed through the normal mortgage financing systems or through home improvement loans. Some jurisdictions are now providing "lead-safe" certificates for housing found to be lead-safe to encourage property owners to make investments in lead-safety, as much as they would any other capital improvement or on-going maintenance program. HUD also funds training programs for remodeling, renovation, painting contractors, landlords, maintenance workers, housing inspectors and the public to promote the broad adoption of lead-safe work practices.

SYNCHRONIZATION

Question. HUD staff have indicated that the HUD Budget office is pursuing a policy of synchronization of HUD section 8 and public housing contracts. What is this policy and program?

Answer. Synchronization is a concept which was introduced by housing industry groups during the negotiated rule-making meetings on the Section 8 renewal policy. The term "synchronization" means to align contract expiration dates for a public housing authority (PHA) to occur at the same time. This concept is only applicable to the Section 8 tenant-based programs.

Over the years, housing agencies have been awarded numerous funding increments through Notice of Fund Availability (NOFA) competition, conversions of tenant-based assistance, demonstration programs, etc. Each allocation of funding pro-

vided by HUD is unique, having effective and expiration contract dates based on: (1) the length of the contract, (2) the date funding was awarded by HUD, and (3) the execution date of the annual contributions contract.

Currently, although there are only 3,000 PHAs, there are over 20,000 funding increments with renewal dates occurring throughout the year. Given an annual renewal policy with a 1-year term, the process is time and staff intensive for both the Department as well as the PHAs.

Moreover, multiple contracts expiring at different times throughout the year increase the complexity of formulating budget projections, creates confusion, and has, in fact, contributed to under-utilization of the unit inventory by some PHAs. During the negotiated rule-making sessions conducted during 1999, the housing industry groups requested that the Department realign all contracts for a housing agency to expire on the same date, which would result in one contract renewal date each year for a housing agency.

Question. What are the costs associated with it and what is and will be the impact of this policy and program on section 8 and public housing programs?

Answer. The realignment of contract expiration dates for each housing agency involves both contract extensions as well as truncations. The net effect of the realignment results in a cost since most contracts need to be extended to a new future date. The current estimate to synchronize the increments is a one-time cost of approximately $1.8 billion.

The impact of this policy on the Section 8 program is that both HUD and the housing agencies will be able to manage program funds in more effectively and efficiently. Budgetary projections will be facilitated, and the Department will be able to quickly identify program under-utilization, and reallocate unused resources to other housing authorities. Recaptures would be minimized.

Question. Please identify all budget and other documents provided to the Congress that identify and discuss this policy and program?

Answer. As one of the discussion items during the Congressionally mandated negotiated rule making session for the development of a Section 8 renewal formula, a discussion of the Department's "synchronization" is included in the Federal Register: "Renewal of Expiring Annual Contributions Contracts in the Tenant-Based Section 8 Programs; Formula for Allocation of Housing Assistance; Final Rule," published October 21, 1999. A copy of this document is attached for your information.

[FROM THE FEDERAL REGISTER, OCTOBER 21, 1999]

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

24 CFR Part 982

[Docket No. FR–4459–F–03]

RIN 2577–AB96

Renewal of Expiring Annual Contributions Contracts in the Tenant-Based Section 8 Program; Formula for Allocation of Housing Assistance

AGENCY: Office of Public and Indian Housing, HUD.

ACTION: Final rule.

SUMMARY: This rule specifies the method HUD will use in allocating housing assistance available to renew expiring contracts with public housing agencies (PHAs) for Section 8 tenant-based housing assistance. As required by statute, this rule is the product of a negotiated rulemaking, following implementation, as further required by statute, of a HUD notice on this subject.

EFFECTIVE DATE: November 22, 1999.

FOR FURTHER INFORMATION CONTACT: Robert Dalzell, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 Seventh Street, SW, Room 4204, Washington, DC 20410; telephone (202) 708–1380. (This is not a toll-free number.) Persons with hearing or speech impairments may access that number via TTY by calling the Federal Information Relay Service at (800) 877–8339.

SUPPLEMENTARY INFORMATION:

I. Background

The statutory provision that provides the foundation for this rule is section 8(dd) of the United States Housing Act of 1937 (the 1937 Housing Act)(42 U.S.C. 1437(dd)), as added by section 556(a) of the Quality Housing and Work Responsibility Act of 1998 (Pub. L. 105–276, 112 Stat. 2461, approved October 21, 1998) ("Public Housing Reform Act"). The new section 8(dd) directs HUD to establish an allocation baseline amount of assistance (budget authority) to cover the renewals,

and to apply an inflation factor (based on local or regional factors) to the baseline. The new provision states as follows:

(dd) *Tenant-Based Contract Renewals.*—Subject to amounts provided in appropriation Acts, starting in fiscal year 1999, the Secretary shall renew all expiring tenant-based annual contribution contracts under this section by applying an inflation factor based on local or regional factors to an allocation baseline. The allocation baseline shall be calculated by including, at a minimum, amounts sufficient to ensure continued assistance for the actual number of families assisted as of October 1, 1997, with appropriate upward adjustments for incremental assistance and additional families authorized subsequent to that date.

Section 556(b) of the Public Housing Reform Act required the Department to implement section 8(dd) of the 1937 Housing Act through notice not later than December 31, 1998, and to issue final regulations on the allocation of tenant-based Section 8 annual contributions contract renewal funding that are developed through the negotiated rulemaking process no later than October 21, 1999.

On December 30, 1998, the Department issued HUD Notice 98–65 to implement the provision, satisfying the requirement of section 556(b) to implement the new provision through Notice not later than December 31, 1998. The Department published a notice in the FEDERAL REGISTER on February 18, 1999, advising the public of the provisions of HUD Notice 98–65. The Department has developed this final rule implementing the requirements of section 8(dd) of the 1937 Housing Act through a negotiated rulemaking process, in accordance with the statutory requirements of section 556.

II. Negotiated Rulemaking

HUD convened a negotiated rulemaking advisory committee to assist in developing this final rule—the Section 8 Housing Certificate Fund Negotiated Rulemaking Committee. (See publication of notice of establishment of the Committee on April 26, 1999, 64 FR 20232.) The charter for the Committee stated: "The purpose of the Committee is to discuss and negotiate a rule that would change the current method of distributing funds to public housing agencies (PHAs) for purposes of renewing assistance contracts in the tenant-based Section 8 program. The committee will consist of persons representing stakeholder interests in the outcome of the rule." Records of the advisory committee's deliberations can be found at http://www.hud.gov/pih/pih.html.

The members of the advisory committee were as follows:

HOUSING AGENCIES

Massachusetts Department of Housing and Community Development, Boston, MA
New Jersey Department of Community Affairs, Trenton, NJ
Southeastern Minnesota Multi-County Housing and Redevelopment Authority, Wabasha, MN
Oklahoma Housing Finance Agency, Oklahoma City, OK
Fort Worth Housing Authority, Fort Worth TX
Minneapolis Metropolitan Council Housing and Redevelopment Agency, Saint Paul, MN
Santa Cruz County Housing Authority, Santa Cruz, CA
Burlington Housing Authority, Burlington, VT
Michigan State Housing Development Authority, Lansing, MI
New York City Housing Authority, NY, NY
Atlanta Housing Authority, Atlanta, GA
Cincinnati Metropolitan Housing Authority, Cincinnati, OH
Housing Authority of the City of Los Angeles, Los Angeles, CA
Stillwater Housing Authority, Stillwater, OK
Spokane Housing Authority, Spokane, WA
Jacksonville Housing Authority, Jacksonville, FL
Panama City Housing Authority, Bay County, FL
Alameda County Housing Authority, Hayward, CA
Housing Authority of New Orleans, New Orleans, LA
Stustman County Housing Authority, Stustman County, ND

PUBLIC INTEREST GROUPS

Center on Budget and Policy Priorities, Washington, DC
New Community Corporation, Newark, NJ
Disability Rights Action Coalition for Housing
Section 8 Resident Council of New Orleans, Inc., New Orleans, LA

INDEPENDENT ACCOUNTING AND CONSULTING FIRMS

Fenton, Ewald & Associates, PC
IMRglobal—Orion Consulting, Inc.

NATIONAL/REGIONAL PHA ASSOCIATIONS

National Leased Housing Association (NLHA)
National Association of Housing and Redevelopment Officials (NAHRO)
Council of Large Public Housing Authorities (CLPHA)
Public Housing Authority Directors Association (PHADA)

(Note that 1. Fenton, Ewald & Associates, PC was made an alternate due to its representative's time constraints and that the Southeast Regional Section Eight Housing Association (SERSHA) was added as a member of the Committee)

FEDERAL GOVERNMENT

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

The Committee met in Washington, DC, on April 27 and 28, 1999, on June 2 and 3, 1999, on June 21 and 22, 1999, on July 19 and 20, 1999, on August 19 and 20, 1999 and on September 28 and 29th, 1999. (See notices of meetings: 64 FR 26923, May 18, 1999 and 64 FR 30450, June 8, 1999.) These Committee meetings were led by Larry Susskind and David Fairman of the Consensus Building Institute ("CBI"), as facilitators/mediators. Tom Fee and Michael Lewis, also of CBI, assisted in the facilitation/mediation. Kelly Davenport of CBI provided further assistance, taking minutes of the meetings.

HUD appreciates the active participation in this negotiated rulemaking process by such knowledgeable groups. The participants spent many days reviewing materials, working with others in small groups to prepare draft position papers, attended meetings of the Committee, and participated in teleconferences. Ultimately, the members reached consensus on the content of this rule. During the course of their deliberations, they provided valuable advice to the Department on broader issues, not reflected in this rule.

III. Discussion of Comments

A. General

This section provides a brief overview of the most important issues discussed in the meetings of the Committee over the course of its deliberations. This overview of the issues is not a detailed recitation of the more than 12 days of meetings or the multiple additional work group meetings/conference calls that took place during the term of the Committee's charter but rather highlights the significant issues considered by the Committee. In addition to providing HUD with recommendations related to this regulation on the methodology for allocating Section 8 renewal funding, the Committee also provided recommendations on related issues (including policy on ACC reserves) that HUD intends to implement through a FEDERAL REGISTER Notice. This overview of the discussion of the Committee focuses only on the issues related to the regulation itself and not on the issues discussed in conjunction with developing separate Notice(s).

B. Establishing the Baseline

To initiate discussion of housing assistance allocation methods, HUD staff provided background information to the Committee regarding the various methods used over time to calculate renewals. An explanation of the current renewal funding Notice, PIH 98–65 (HA), including the process for setting the baseline and awarding renewal funding for Fiscal Year 1998, was reviewed by HUD staff.

Issue. The Committee discussed specific details regarding accounting rules and anomalies of the current method of calculating the allocation of renewal funding. Several members expressed concern that there was the possibility of discrepancies between historical documented unit counts and the unit counts in HUD's data systems. Members questioned whether a crosscheck of the data in the HUDCAPS system against their own data was possible. Some members felt that the October 1, 1997 baseline data were somewhat arbitrary and could adversely impact agencies. Members suggested alternative ways to setting the baseline units, such as choosing dates other that October 1, 1997. Concerns about using October 1, 1997 included that this date "freezes" many inequities among PHAs (e.g., rewarding those who continued leasing during the 90-day freeze period declared by HUD). A suggestion was made to use October 1, 1998 as the baseline date, because at this time all PHAs

would have had time to adjust to HUD interim rules and guidelines on baseline accounting and renewal funding.

Response. HUD noted that it had confidence that data discrepancies in HUDCAPS are minor, and that most of the discrepancies between HUDCAPS and PHA data would be attributable to data entry problems, or differences in interpretations of unit or project classifications. HUD representatives stated that they would check the kinds of information that could be shared and how this information could be shared. HUD representatives stated that they had revised the baseline determination method to ensure that each PHA would receive the higher of the number contracted or the number leased on October 1, 1997. HUD indicated that the statute required a focus on the state of housing authorities as of October 1, 1997 and that using other dates would not satisfy the statutory mandate.

Conclusion: The Committee reached consensus that the baseline number of units should be the higher of the number of units leased as of October 1, 1997 or the number of units reserved by HUD as of October 1, 1997. The Department has added approximately 19,000 units to its previously reserved number of units as a result of the comparison. This increase in the number of units as well as transactions that have taken place since October 1, 1997 will be reflected in the baseline established as of December 31, 1999, in accordance with the rule. In response to the Committee's recommendation, HUD will establish a mechanism for PHAs to request an adjustment of the baseline unit number assigned to them if they can demonstrate that the number in HUD's system is inaccurate.

C. Unit-Based vs. Dollar Based Funding Allocation

Issue. The Committee discussed moving from the current "unit-based" funding system (using units multiplied by an adjusted per unit cost as the basis for determining annual funding amounts) to a "dollar-based" system: A dollar-based system would fund PHAs by adjusting their previous year's dollar grant amount to account for changes in local rental costs, without considering how many units were rented through the program in the previous year. Initially there appeared to be a preference for a dollar-based system, for reasons of administrative simplicity and ability to serve more households if costs are contained. Some Committee members raised concerns regarding switching to a dollar-based system, because it might lead to significant swings in the number of families assisted year-to-year.

The Committee extensively explored possible adjustment factors that would be applied to PHA's previous year grant amount in a dollar-based system. The Committee reviewed data analysis from Andersen Consulting Corporation that compared the accuracy of different adjustment factors against the actual experience of approximately 400 housing authorities over the course of 3 years (1995–1997) for which reliable historical data was available. The most reliable predictor of future costs proved to be changes in a housing authority's most recent year's actual costs in HUDCAPS. The analysis uncovered significant problems in using MTCS data for the purpose of calculating renewals at this time.

Response. HUD indicated that it is cognizant of its obligation to protect existing assisted families from losing their assistance due to a shortfall in funding. In addition a number of the reasons why per unit costs might vary would not be related to the PHA's discretionary actions (e.g., the need to meet new income targeting requirements).

Conclusion: After much discussion, the Committee and HUD reached consensus that the Department should have authority to use the current unit-based method for the next several years. Given the limitations of current data systems and adjustment factors, the unit-based system has the best potential to predict fluctuations in per unit costs and to ensure reasonably adequate funding to support the reserved number of units in a housing authority's inventory.

Issue. Some members of the Committee, including HUD, expressed concern that the current method creates a disincentive for PHAs to contain per-unit costs, because the higher a PHA's per-unit costs, the higher its funding for the next year. Additionally, the current system creates a disincentive for PHAs to lease more than their contracted number of units, because their funding allocations are determined based on the number of reserved units, not the leased number of units.

Other members of the Committee asserted that costs are largely outside of the control of a PHA. Rents are set by the local market and the size of the family. The PHA does not control the local rental market and has little control over the family size, because it has to follow the waiting list. Tenant contributions are affected for the most part by tenant incomes. Again, this factor is largely controlled by residents themselves, as well as the local job market. However, in some important instances, a PHA can influence the per-unit cost. These instances include, but are not limited to, rent reasonableness, subsidy standards, and payment standards. (For this pur-

pose, "subsidy standards" refer to a PHA's policy for determining the appropriate unit size for a particular household.)

Committee members also made the point that PHAs themselves do not benefit from an increase in the grant amount for renewals, because their administrative fee is not tied to the grant amount used to subsidize families. The administrative fee formula actually provides an incentive for cost containment, because a PHA would benefit from being able to lease more units—which could only be accomplished by lower per-unit costs.

Members of the Committee also emphasized how difficult it would be to isolate how much of a change in per-unit costs was attributable to actions taken by a PHA as opposed to market/demographic changes totally outside the control of the PHA.

Response. HUD is concerned that the regulation's methodology not create an incentive or bias toward higher per-unit costs as a result of PHA policies that can affect per-unit costs. Such a bias can result both from the current rule's characteristic of adapting to higher costs over time without penalty and from its subtraction of funding to support additional units that a PHA is able to put under lease because of cost saving measures. HUD acknowledged that there are very significant difficulties administratively in isolating the effects of PHA policies on cost per unit. HUD proposed that the rule give it flexibility to put in place checks and balances that would offset the impact of PHA policies on per-unit costs and ultimately the allocation amount.

Conclusion: HUD's proposed mechanism for addressing cost containment is embodied in paragraph (g) of the rule. Paragraph (g)(1) permits HUD to put in place mechanisms to step in to prevent a PHA from becoming overextended and exceeding its allocated funding. Paragraph (g)(2) gives HUD the ability to act on either a case-by-case or a systemic basis. If the Department's analysis of the program costs and related factors determines that systemic adjustments, including cost containment and other cost adjustments, to the program are necessary because of threats to the future availability of funding, HUD has agreed that it would consult with PHA representatives and other relevant stakeholders before putting such a policy in place. HUD further indicated that any such cost adjustment would be consistent with the legitimate program goals. These goals are:

(1) Deconcentration of poverty and expanding housing opportunities;
(2) Not imposing unreasonable rent burdens on residents;
(3) Compliance with the income targeting requirements of the Public Housing Reform Act;
(4) Consistency with applicable consolidated plan(s);
(5) Assuring rent reasonableness;
(6) Maintaining program efficiency and economy;
(7) Providing service to additional households within budgetary limitations; and
(8) Providing service to the adjusted baseline number of families.

Paragraph (g)(3) gives HUD the flexibility to keep PHAs with declining per unit costs from losing funding under the regulation and to allow additional households to be served if costs are contained. Many factors are intersecting to influence per unit costs at this time (including the merger of the certificate and voucher program, the requirement for income targeting, the requirement that payment standards not impose unreasonable rent burdens, the flexibility of housing authorities to set payment standards between 90% and 110% of FMR on their own as well as the continued implementation of this rule's methodology that indexes funding closely to per unit costs). HUD will gain program experience as it monitors program costs and analyzes the reasons for fluctuations in costs.

D. Inflation Factors

Issue: The Committee considered other more up-to-date measurement of rents, or weighting the Annual Adjustment Factor so that the most recent inflation data count for more than older data. Additionally, the Committee recommended that inflation factors be more closely attuned to individual PHAs' housing markets: examples included local rents, and the use of local government or real estate agency data on rents.

Response: Based on its program experience, HUD staff advised that some of these options could work, but that the smaller the sample area, the higher the cost to obtain statistically valid data on costs. Sometimes the more accurate the Annual Adjustment Factors (AAFs) could produce lower rather than higher inflation factors for some PHAs. A review and comparison of the Annual Adjustment Factor and the National Inflation Factor were presented.

Conclusion: The Committee agreed to keep the AAF as it exists in the rule for the time being. HUD will examine whether it can get better data and more predictable information in the future. At the Committee's request, HUD added a provision

that will allow it to consider requests from PHAs on a case-by-case basis in instances where because of special circumstances the AAF is not accurately predicting per unit cost.

IV. Renewal Funding Level Consideration

The renewal formula included in this regulation assumes continuation of the current system, in which the Department allocates sufficient funds to renew 100 percent of the units reserved for a PHA, even though many PHAs do not use all of the allocated funds. The Department subsequently recaptures funds that PHAs do not use after the end of their fiscal years. This system of initially overfunding on a national basis and then recapturing, has the advantage of assuring that each PHA will have the necessary renewal funds, but it also has created some confusion in Congress and elsewhere.

At the end of the fiscal year 2000 appropriations process, the Senate Appropriations Committee raised substantial concerns about the tenant-based assistance program that appear to be partly related to this system. The Administration is exploring the feasibility and desirability of an approach that would minimize overfunding and subsequent recapture, while still meeting the basic requirement that each PHA have the necessary funding for timely renewals. The evaluation and any Administration proposals will be mindful of the consensus reached by the negotiated rulemaking committee.

V. Explanation of Rule Text

Renewal Units

This rule revises part 982, governing tenant-based assistance. It adds a new defined term, "renewal units" to the definitions found at § 982.4. This rule also adds a new § 982.102 to outline a multi-step process for calculating the number of units that constitute "renewal units." The total number of renewal units will be assigned to one or more (if applicable) of a housing agency's funding increments. Ultimately, the Department will multiply the number of renewal units times the adjusted per unit cost to calculate the amount of funding a housing agency will receive to renew a given funding increment.

Applicability

This rule will apply to the renewal of funding increments that expire in calendar year 2000 and thereafter (the initial increments covered by the regulation would be those that expire on January 31, 2000). The Department adjusted to a calendar year basis for allocating renewal funding in the first quarter of 1999. The Department adjusted to a calendar year basis to ensure that it would have adequate time to process renewal funding in advance of expirations even if appropriations are not finalized until late in a given fiscal year or early in a subsequent fiscal year. The regulation also makes it clear that it applies to units that a housing agency project bases pursuant to regulatory flexibility to project base up to 15% of the tenant-based units that are reserved for it.

Renewal Methodology

The new § 982.102 outlines the method for calculating renewal funding. The Department does have the ability to adjust the amounts allocated if the Department's appropriation is not sufficient to fully fund all housing agencies pursuant to the regulation.

Determining the Amount of Budget Authority Allocated for Renewal of an Expiring Funding Increment

The basic calculation the Department performs to determine the renewal funding for an expiring increment is multiplication of the number of renewal units assigned to the increment by the adjusted per unit cost.

For example, the Department calculated the adjusted baseline number of units for the Main Street Housing Authority to be 115 for the year 2000. It then multiplied the adjusted baseline number of units (115) by the final per unit cost ($4979) to calculate the gross amount of renewal funding for the housing authority, $572,585.

Determining the Number of Renewal Units

The Department will determine the number of renewal units for each calendar year as of the last day of the previous calendar year through a 3-step process.

Step 1—The Department will calculate the initial baseline. It will be set at the reserved number of units (the number of units awarded to the housing agency during the history of the program) as of December 31, 1999. The statute requires that the Department ensure, at a minimum, sufficient funding for the number of families assisted as of October 1, 1997. The Department has already compared the number

of reserved units as of October 1, 1997 with the number of program families assisted as of that date. In instances in which the number of program families exceeded the reserved units as of October 1, 1997, the Department reserved additional units to account for the difference. These additional units were awarded to housing agencies in or before September of 1999. Because of the actions the Department has taken to account for the October 1, 1997 statutory minimum, it believes the number of reserved units will already have taken into account the statutory October 1, 1997 requirement when it sets the initial baseline as of December 31, 1999. In the event the Department has made an error in its analysis to ensure adherence to the statutory minimum, the Department has the ability to correct for such an error in 982.102(d)(3).

For example, on December 31, 1999, the Department's records indicated that it had reserved 110 units for the housing authority. The Department would set the initial baseline at 110 units.

Step 2—Each calendar year, the Department will review all of the transactions that have altered the number of reserved units since it set the initial baseline. The Department will make adjustments to add to the initial baseline any additional units awarded to the housing authority by the Department supported from additional funding reserved since setting of the initial baseline. Adjustments to the baseline number of units will include units supported by incremental funding as well as other funding such as that awarded to provide continued assistance to assisted families pursuant to the conversion of project based assistance to tenant-based assistance. The Department also will include adjustments for budget authority reallocated from one housing authority to others. In this case, the adjusted baseline of the PHA whose budget authority is being reallocated would decrease, reflecting the decrease in budget authority, and the adjusted baseline of PHAs to which the budget authority is being reallocated would increase.

For example, in calendar year 2000, the Main Street Housing Authority received 10 incremental units in the Family Unification Program. In 2000, the authority also had 10 units added to its inventory as a result of the conversion of a property from project based to tenant-based assistance. All 20 of these additional units would be added to the initial baseline to calculate the adjusted baseline number of units, 130 for the year 2001.

Step 3—In its final step in determining the number of renewal units that will be used to calculate renewal funding, the Department will further adjust the baseline number by subtracting the number of units supported by contracts that are not scheduled to expire until after the end of the calendar year. The baseline number of units includes such non-expiring units; however, the Department has previously allocated sufficient budget authority to support such units beyond the time period for which it is allocating renewal funding.

For example, the Department's records indicate that the Main Street Housing Authority has 15 units in its Initial Baseline number of units that are not scheduled to expire until 2002. The Department would then subtract 15 units from the Main Street Housing Authority's 130 units to revise the Adjusted Baseline Number of Units to 115. Similarly, in the event that the Department awarded budget authority for 50 incremental units for Welfare to Work in 2000 that would not expire until 2001, the Department would subtract the 50 units from the baseline in 2000 because they would not expire during that year.

Determining the Adjusted per Unit Cost

The Department will derive an annual actual per unit cost using a 3 step process.

Step 1—The Department will extract the total expenditures for all of the housing authority's Section 8 tenant-based assistance programs and the unit months leased information from the most recent approved year end statement (Form HUD–52681) that each housing authority has filed with the Department. The Department will divide the total expenditures for all of the housing authority's Section 8 tenant-based assistance programs by the unit months leased to derive an average monthly per unit cost.

Step 2—The Department will multiply the monthly per unit cost by 12 (months) to obtain an annual per unit cost.

Step 3—The Department will then multiply the result of step 2 above by the Section 8 Housing Assistance Payments Program Contract Rent Annual Adjustment Factors (table 1 amount with the highest cost utility included) for the applicable intervening Federal Fiscal Years between the time of the last year end statement and the time of the renewal to generate an adjusted annual per unit cost.

For example, the Main Street Housing Authority's 1998 Year End Statement (the most recent one approved) indicated that it expended $120,000 in its tenant-based Section 8 assistance programs and that it achieved 300 unit months leased. The De-

partment would take the total expenditure ($120,000) and divide it by the unit months leased (300) to calculate the monthly per unit cost ($400) and then multiply the result by 12 months to obtain an actual annual per unit cost ($4,800).

To continue the example, the Annual Adjustment Factors for the Main Street Housing Authority were 1.5% in 1999 and 2.2% for 2000. The Department would take the original annual per unit cost ($4,800) and adjust it by 1.5% ($4,872) and then again by 2.2% to obtain the resulting adjusted per unit cost ($4,979).

Many housing agencies have jurisdictions that cover multiple rental markets with separate AAFs. In such instances, the Department will use the highest AAF that applies to a portion of the housing agency's units and use it as the adjustment factor.

For example, the Main Street Housing Authority is a regional agency that covers a metropolitan area with an AAF for 1999 set at 2.1% and for 2000 set at 1.9%. The housing authority's jurisdiction also covers several non-metropolitan counties outside of the metropolitan area assigned an AAF for 1999 of 1.5% and for 2000 set at 2.0%. In this instance, the Department will use the higher metropolitan area AAF for 1999 (2.1%) and the higher non-metropolitan area AAF for 2000 (2.0%).

CACC Amendment To Add Renewal Funding

The Department intends to process renewal funding if possible at least a month before a given funding increment is due to expire. A normal renewal will extend the expiration date for one year.

Modification of Allocation of Budget Authority

The regulation permits HUD to address the issue of cost containment through this provision. Paragraph (g)(1) permits HUD to put in place mechanisms to step in to prevent a PHA from becoming overextended and exceeding its allocated funding. Paragraph (g)(2) gives HUD the ability to act on either a case-by-case or a systemic basis. If the Department's analysis of the program costs and related factors determines that systemic adjustments to the program, including cost containment and other cost adjustments, are necessary because of threats to the future availability of funding, HUD has agreed that it would consult with PHA representatives and other relevant stakeholders before putting such a policy in place. Paragraph (g)(3) gives HUD the flexibility to keep PHAs with declining per unit costs from losing funding under the regulation and to allow additional households to be served if costs are contained.

Ability To Prorate and Synchronize Contract Funding Increments

Notwithstanding the formula amount that HUD derives pursuant to the regulation, the Department is permitted to prorate the renewal of units that expire on different dates throughout the year in order to have their expiration date match the expiration of other units within the housing authority's inventory and/or a given point in time in relation to the housing authority's fiscal year. The Department will consider using this flexibility in order to merge the multiple sets of units for the purpose of allocating renewal funding in the future. The Department desires to consolidate increments as much as possible in order to reduce the tracking required for thousands of separate increments. The Department will endeavor to synchronize and/or merge all increments so as to expire 6 months after the housing agency's fiscal year. Such a schedule would permit the Department to use a year end statement that is less than a year old to calculate current per unit costs at the time of the renewal.

For example, the Main Street Housing Authority has 115 units that require renewal on April 1, 2000 and also has 20 units that were awarded to it on August 1, 1999 that would require renewal on August 1, 2000. If the Department decided to merge the two sets of units for future renewals, it would have the ability to prorate the renewal of the 20 units so that they would expire on April 1, 2001, simultaneously with the expiration of the other 115 units. The Department would be able to merge the two sets of units into one set of 135 units for the purpose of calculating future renewal funding.

Reallocation of Renewal Units

This provision gives HUD the ability by FEDERAL REGISTER notice to permanently de-reserve units and their associated budget authority from a PHA with performances deficiencies (particularly underleasing) and to reallocate the budget authority to other PHAs. The reallocation would not preclude a PHA from being awarded new units in the future.

VI. Findings and Certifications

Impact on Small Entities

The Regulatory Flexibility Act, 5 U.S.C. 601–612, requires that an agency analyze the impact of a rule on small entities whenever it determines that the rule is likely to have a significant impact on a substantial number of small entities. Most small PHAs do not qualify as "small governmental entities" under the Act. However, this rule, developed in consultation with a negotiated rulemaking committee including representatives of small PHAs, will not be likely to have a significant impact on a substantial number of small PHAs or on the few of them that qualify as "small governmental entities." Therefore, no further analysis is required under the Act.

Environmental Impact

This final rule does not direct, provide for assistance or loan and mortgage insurance for, or otherwise govern or regulate, real property acquisition, disposition, leasing (other than tenant-based rental assistance), rehabilitation, alteration, demolition, or new construction. This rule also does not establish, revise or provide for standards for construction or construction materials, manufactured housing, or occupancy. Accordingly, under HUD regulations (24 CFR 50.19(c)(1)), this rule is categorically excluded from the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. 4321) and is not subject to environmental review under related laws and authorities (24 CFR 50.4).

Federalism Impact

The General Counsel, as the Designated Official under section 6(a) of Executive Order 12612, *Federalism,* has determined that the policies contained in this rule will not have substantial direct effects on states or their political subdivisions, or the relationship between the federal government and the states, or on the distribution of power and responsibilities among the various levels of government. As a result, the rule is not subject to review under the order.

Unfunded Mandates

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1532) establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. This proposed rule does not impose a Federal mandate that will result in the expenditure by State, local, or tribal governments in the aggregate, or by the private sector, of $100 million or more in any one year.

Regulatory Review

The Office of Management and Budget (OMB) has reviewed this proposed rule under Executive Order 12866, *Regulatory Planning and Review,* issued by the President on September 30, 1993. Any changes made in this proposed rule after its submission to OMB are identified in the docket file, which is available for public inspection during regular business hours in the Regulations Division, Office of General Counsel, Room 10276, U.S. Department of Housing and Urban Development, 451 Seventh Street, SW, Washington, DC 20410.

Catalog

The Catalog of Federal Domestic Assistance numbers for these programs are 14.855 and 14.857.

List of Subjects in 24 CFR Part 982

Grant programs—housing and community development, Housing, Rent subsidies.

Accordingly, HUD amends part 982 of title 24 of the Code of Federal Regulations as follows:

PART 982—SECTION 8 TENANT-BASED ASSISTANCE: HOUSING CHOICE VOUCHER PROGRAM

1. The authority citation for part 982 continues to read as follows:

AUTHORITY: 42 U.S.C. 1437f and 3535(d).

2. Amend § 982.4(b) by adding the definition of *Renewal units,* in alphabetical order, to read as follows:

§ 982.4 Definitions.

* * * * * * *

(b) * * *

Renewal units. The number of units, as determined by HUD, for which funding is reserved on HUD books for a PHA's program. This number is used is calculating renewal budget authority in accordance with § 982.102.

* * * * * * *

§§ 982.102 and 982.103 [Redesignated as §§ 982.103 and 982.104]

3. Redesignate §§ 982.102 and 982.103 as §§ 982.103 and 982.104, respectively.

4. Add a new § 982.102 to read as follows:

§ 982.102 Allocation of budget authority for renewal of expiring CACC funding increments.

(a) *Applicability.* This section applies to the renewal of CACC funding increments in the program (as described in § 982.151(a)(2)) that expire after December 31, 1999 (including any assistance that the PHA has attached to units for project based assistance under part 983 of this title). This section implements section 8(dd) of the 1937 Act (42 U.S.C. 1437f(dd)),

(b) *Renewal Methodology.* HUD will use the following methodology to determine the amount of budget authority to be allocated to a PHA for the renewal of expiring CACC funding increments in the program, subject to the availability of appropriated funds. If the amount of appropriated funds is not sufficient to provide the full amount of renewal funding for PHAs, as calculated in accordance with this section, HUD may establish a procedure to adjust allocations for the shortfall in funding.

(c) *Determining the amount of budget authority allocated for renewal of an expiring funding increment.* Subject to availability of appropriated funds, as determined by HUD, the amount of budget authority allocated by HUD to a PHA for renewal of each program funding increment that expires during a calendar year will be equal to:

(1) *Number of renewal units.* The number of renewal units assigned to the funding increment (as determined by HUD pursuant to paragraph (d) of this section); multiplied by

(2) *Adjusted annual per unit cost.* The adjusted annual per unit cost (as determined by HUD pursuant to paragraph (e) of this section).

(d) *Determining the number of renewal units.*—(1) *Number of renewal units.* HUD will determine the total number of renewal units for a PHA's program as of the last day of the calendar year previous to the calendar year for which renewal funding is calculated. The number of renewal units for a PHA's program will be determined as follows:

(i) *Step 1: Establishing the initial baseline.* HUD will establish a baseline number of units ("baseline") for each PHA program. The initial baseline equals the number of units reserved by HUD for the PHA program as of December 31, 1999.

(ii) *Step 2: Establishing the adjusted baseline.* The adjusted baseline equals the initial baseline with the following adjustments from the initial baseline as of the last day of the calendar year previous to the calendar year for which renewal funding is calculated:

(A) *Additional units.* HUD will add to the initial baseline any additional units reserved for the PHA after December 31, 1999.

(B) *Units removed.* HUD will subtract from the initial baseline any units de-reserved by HUD from the PHA program after December 31, 1999.

(iii) *Step 3: Determining the number of renewal units.* The number of renewal units equals the adjusted baseline minus the number of units supported by contract funding increments that expire after the end of the calendar year.

(2) *Funding increments.* HUD will assign all units reserved for a PHA program to one or more funding increment(s).

(3) *Correction of errors.* HUD may adjust the number of renewal units to correct errors.

(e) *Determining the adjusted per unit cost.* HUD will determine the PHA's adjusted per unit cost when HUD processes the allocation of renewal funding for an expiring contract funding increment. The adjusted per unit cost calculated will be determined as follows:

(1) *Step 1: Determining monthly program expenditure.*—(i) *Use of most recent HUD-approved year end statement.* HUD will determine the PHA's monthly per unit program expenditure for the PHA certificate and voucher programs (including project-based assistance under such programs) under the CACC with HUD using data from the PHA's most recent HUD-approved year end statement.

(ii) *Monthly program expenditure.* The monthly program expenditure equals:

(A) *Total program expenditure.* The PHA's total program expenditure (the total of housing assistance payments and administrative costs) for the PHA fiscal year covered by the approved year end statement; divided by

(B) *Total unit months leased.* The total of unit months leased for the PHA fiscal year covered by the approved year end statement.

(2) *Step 2: Determining annual per unit cost.* HUD will determine the PHA's annual per unit cost. The annual per unit cost equals the monthly program expenditures (as determined under paragraph (e)(1)(ii) of this section) multiplied by 12.

(3) *Step 3: Determining adjusted annual per unit cost.* (i) HUD will determine the PHA's adjusted annual per unit cost. The adjusted annual per unit cost equals the annual per unit cost (as determined under paragraph (e)(2) of this section) multiplied cumulatively by the applicable published Section 8 housing assistance payments program annual adjustment factors in effect during the period from the end of the PHA fiscal year covered by the approved year end statement to the time when HUD processes the allocation of renewal funding.

(ii) *Use of annual adjustment factor applicable to PHA jurisdiction.* For this purpose, HUD will use the annual adjustment factor from the notice published annually in the FEDERAL REGISTER pursuant to part 888 that is applicable to the jurisdiction of the PHA. For a PHA whose jurisdiction spans multiple annual adjustment factor areas, HUD will use the highest applicable annual adjustment factor.

(iii) *Use of annual adjustment factors in effect subsequent to most recent Year End Statement.* HUD will use the Annual Adjustment Factors in effect during the time period subsequent to the time covered by the most recent HUD approved Year End Statement and the time of the processing of the contract funding increment to be renewed.

(iii) *Special circumstances.* At its discretion, HUD may modify the adjusted annual per unit cost based on receipt of a modification request from a PHA. The modification request must demonstrate that because of special circumstances application of the annual adjustment factor will not provide an accurate adjusted annual per unit cost.

(4) *Correction of errors.* HUD may correct for errors in the adjusted per unit cost.

(f) *CACC amendment to add renewal funding.* HUD will reserve allocated renewal funding available to the PHA within a reasonable time prior to the expiration of the funding increment to be renewed and establish a new expiration date one-year from the date of such expiration.

(g) *Modification of allocation of budget authority.*—(1) *HUD authority to conform PHA program costs with PHA program finances through* ***Federal Register*** *notice.* In the event that a PHA's costs incurred threaten to exceed budget authority and allowable reserves, HUD reserves the right, through FEDERAL REGISTER notice, to bring PHA program costs and the number of families served, in line with PHA program finances.

(2) *HUD authority to limit increases of per unit cost through* ***Federal Register*** *notice.* HUD may, by FEDERAL REGISTER notice, limit the amount or percentage of increases in the adjusted annual per unit cost to be used in calculating the allocation of budget authority.

(3) *HUD authority to limit decreases to per unit costs through* FEDERAL REGISTER *notice.* HUD may, by FEDERAL REGISTER notice, limit the amount or percentage of decreases in the adjusted annual per unit cost to be used in calculating the allocation of budget authority.

(4) *Contents of* FEDERAL REGISTER *notice.* If HUD publishes a FEDERAL REGISTER notice pursuant to paragraphs (g)(1), (g)(2) or (g)(3) of this section, it will describe the rationale, circumstances and procedures under which such modifications are implemented. Such circumstances and procedures shall, be consistent with the objective of enabling PHAs and HUD to meet program goals and requirements including but not limited to:

(i) Deconcentration of poverty and expanding housing opportunities;

(ii) Reasonable rent burden;

(iii) Income targeting;

(iv) Consistency with applicable consolidated plan(s);

(v) Rent reasonableness;

(vi) Program efficiency and economy;

(vii) Service to additional households within budgetary limitations; and

(viii) Service to the adjusted baseline number of families.

(5) *Public consultation before issuance of* FEDERAL REGISTER notice. HUD will design and undertake informal public consultation prior to issuing FEDERAL REGISTER notices pursuant to paragraphs (g)(1) or (g)(2) of this section.

(h) *Ability to prorate and synchronize contract funding increments.* Notwithstanding paragraphs (c) through (g) of this section, HUD may prorate the amount of budget authority allocated for the renewal of funding increments that expire on different dates throughout the calendar year. HUD may use such proration to synchronize the expiration dates of funding increments under the PHA's CACC.

(i) *Reallocation of budget authority.* If a PHA has performance deficiencies, such as a failure to adequately lease units, HUD may reallocate some of its budget authority to other PHAs. If HUD determines to reallocate budget authority, it will reduce the number of units reserved by HUD for the PHA program of the PHA whose budget authority is being reallocated and increase the number of units reserved by HUD for the PHAs whose programs are receiving the benefit of the reallocation, so that such PHAs can issue vouchers. HUD will publish a notice in the FEDERAL REGISTER that will describe the circumstances and procedures for reallocating budget authority pursuant to this paragraph.

Dated: October 15, 1999.

Deborah Vincent,

General Deputy Assistant, Secretary for Public and Indian Housing.

[FR Doc. 99–27445 Filed 10–20–99; 8:45 am]

BILLING CODE 4210–33–P

CONSULTANT COSTS

Question. Mr. Secretary, please identify all consultants who have worked for or are working for the Department since the beginning of fiscal year 1999 by name, amount of the contract, purpose of the contract, duration of the contract and the type of bidding process used?

Answer. An attachment has been provided that identifies all consultants who have worked for or are working for the Department since the beginning of fiscal year 1999 by name, salary rate, purpose of project, and duration of employment. These consultants are hired through the Office of Human Resources and not via contracts, therefore the type of bidding process used is not applicable in this case.

CONSULTANTS

Name	Salary		Dates of employment	Office	Nature of project
Elizabeth Burdock	$264.00	PD	08/26/96 to present	Office of Housing	To work with staff to develop task orders for the National Partners in Homeownership program.
Shaun Donovan	333.60	PD	10/13/98 to 07/17/99	Office of Housing	To provide advice on multifamily housing, finance and policy matters.
Andrew Fay	191.66	PD	10/25/98 to 04/10/99	Office of Multifamily Housing Assistance Restructuring.	To draft interim and final regulations on Owner eligibility section of Operating Procedures guide and provide assistance in drafting Portfolio Restructuring Agreement and protocols.
Todd Richardson	38.40	PH	10/08/99 to 05/20/00	Office of Community Planning and Development.	To perform analysis, comparison and evaluation of state and SBA reported disaster data.
Catharine Vernon	384.62	PD	01/03/99 to 05/22/99	Office of Multifamily Housing Assistance Restructuring.	To develop and implement the Asset Allocation and Critical data Tracking system.
Michael Murphy	269.23	PD	12/10/98 to 07/17/99	Office of Multifamily Housing Assistance Restructuring.	To develop system requirements and implement a system to plan, monitor, and review the status of assigned assets, as well as create oversight controls.
Howard Menell	482.61	PD	03/14/99 to 04/24/99	Office of Multifamily Housing Assistance Restructuring.	To negotiate final Portfolio Restructuring Agreement for public and private PAE's.
Frederick Tombar	364.16	PD	01/19/99 to 06/19/99	Office of Housing	To advise the Assistant Secretary on Section 8 contract administration issues. Represent the Assistant Secretary before GAO, OMB and Congressional Budget Committees.
Engram A. Lloyd	372.64	PD	11/29/99 to 02/12/00	Office of Single Family Housing	To advise on impact, efficiencies and benefits derived from organizational realignment within Home Ownership Centers. To evaluate the adequacy of property disposition program controls and recommended necessary changes to safeguard HUD's assets and insurance fund.
Ruth Roman	275.00	PD	10/07/99 to 05/20/00	Office of Housing	To work with Grants Technical Representatives, contracts office and contractor to manage development of new commercials and media campaign for Federal Housing Administration (FHA).
Bonnie Jouhari	124.08	PD	03/06/00 to present	Baltimore Field Office	To provide research, fact finding, telephone and in person interviews, and file reviews with regard to counseling, and housing mobility.

Emmanuel Cleaver, II	46.59	PH	09/21/99 to present	Office of Senior Community	To provide the Secretary's Representative, Great Plains, with advice on matters involving development and public service diversification. Analyzes and evaluates the Department's current procedures and makes recommendations for improvements and refines in the methodology.
Truman Holland	362.00	PD	07/20/98 to present	Office of Multifamily Housing Assistance Restructuring.	To make written recommendations to Congress outlining the characteristics of the Mark to Market process that need change and restructuring related mortgage issues.
Cherylayne B. Walker	372.64	.....	04/03/00 to present	Office of Housing	To provide advice to the Deputy Assistant Secretary for Single Family Housing on the review and formulation of real estate owned disposition procedures.
Michael Stegman	46.57	PH	07/21/99 to present	Office of Housing	To assess conditions and trends for affordable housing in the U.S. and report on major trends, needs and HUD's policy responses to these.
David Snell	236.32	PD	11/08/98 to 01/15/99	Office of Public and Indian Housing, Denver	No records could be obtained.
Steven Kilkelly	206.67	PD	08/28/98 to 10/08/98	Office of Community Planning and Development.	No records could be obtained.
William Apgar	453.86	PD	10/01/97 to 10/24/98	Office of Housing	To provide a wide range of knowledge on matters involving programmatic development and diversification in and for the Office of Housing.
Susan Wachter	453.92	PD	11/25/98 to 11/30/99	Office of Policy Development and Research	To analyze and evaluate current procedures and make recommendations on possible refinements and improvements, as well as conducting a review of proposed strategies.
Virginia Terzano	56.54	PH	06/22/99 to 11/26/99	Office of Public Affairs	To advise and provide expertise on the preparation of remarks, speeches, and talking points on issues, policies, and procedures confronting the Secretary.

Note: PH = per hour; PD = per day.

MORTGAGE PARTNERSHIP PROGRAM

Question. The Mortgage Partnership Program offered by the some Federal Home Loan Banks has allowed members of the Federal Home Loan Bank System to offer FHA loans to consumers at a lower rate—as much as 100 basis points—for first time home buyers in the first year. However, that program is currently capped at $9 billion.

When will the cap be lifted on this program, and what assurances can you give me that first time home buyers will continue to have access to these new FHA loan products?

Answer. The Mortgage Partnership Finance Program (MPF) offered by a number of Federal Home Loan Banks is currently subject to a limit of $9 billion in outstanding residential mortgages that was established by a resolution of the Federal Housing Finance Board, the regulator of the Federal Home Loan Bank System. This program is not under HUD's jurisdiction. However, Secretary Cuomo is a member of the Finance Board and Assistant Secretary Apgar serves as his designee.

On May 3, 2000, the Finance Board's Federal Home Loan Bank Acquired Member Assets, Core Mission Activities, Investment and Advances (AMA/CMA) proposed rule was published for public comment. The rule would authorize the Federal Home Loan Banks to hold acquired member assets (AMA), whole loans acquired from or through Bank System members or associates. Under the proposed rule, the MPF investments, including FHA loans funded through the MPF, would be considered AMA. The proposed rule would place no limit on the amount of AMA the Federal Home Loan Banks could hold, in effect eliminating the $9 billion aggregate limit currently applied to the MPF by resolution.

In addition, the proposed rule does not limit the amount of FHA insured single family loans that a FHLBank could acquire under its MPF, so that any new FHA loan products that the FHLBanks are facilitating under the MPF could continue. Under the proposed rule, AMA would be considered core mission activities (CMA), except that only a proportion of the amount of federal government insured or guaranteed single family mortgage loans (including FHA insured loans) acquired as AMA after April 12, 2000, would be considered CMA. One dollar of government-insured single family AMA would be counted as CMA for every two dollars of conventional loans acquired as AMA. While the proposed rule does not contain any requirement that the FHLBanks engage in any particular amount of CMA, it would encourage the FHLBanks to see to it that the composition of their mortgage portfolios more closely reflects the distribution of loans made in the financial marketplace.

The proposed rule public comment period closes on June 15 and the Finance Board expects to issue the AMA/CMA final rule shortly thereafter.

DOWNPAYMENT SIMPLIFICATION

Question. The fiscal year 1999 VA/HUD spending bill contains an extension of the simplified FHA down payment calculation on a nationwide basis. However, the bill restricted the calculation to a two-year pilot program which is set to expire at the end of this fiscal year.

The Administration's budget contains a permanent, nationwide extension of the simplified down payment calculation. How has the pilot program fared so far, and why do you believe this permanent extension is necessary?

Answer. From the pilot, we learned that overall loan-to-values did not increase significantly and the process was more easily understood by homebuyers, real estate agents, and lenders. We need the permanent authority to maintain the simplified process and to continue to offer a process that is more easily understood than the "sliding-scale" mortgage amount calculation previously employed. Reverting to the previous mortgage amount calculation and losing the ability to continue with a successful program would be counter to FHA's mission.

QUESTIONS SUBMITTED BY SENATOR LARRY CRAIG

GUN CONTROL

Question. Please tell the Subcommittee what HUD's intentions are, and what actions you have taken, with regard to filling a lawsuit against members of the firearms industry.

Answer. As the Department has stated on previous occasions, HUD has no intention of filing a lawsuit in its own capacity against the gun industry. HUD, however, is working with cities and counties that have filed suit against the gun industry, as well as with responsible manufacturers, to find a negotiated solution that will

facilitate the industry's role in reducing the tide of gun violence by fostering safer manufacturing and distribution practices. Should these negotiations prove unsuccessful, HUD is prepared to work with public housing authorities, including those under HUD's control, on a possible suit against the industry.

Question. For example, who authorized the filing of such a lawsuit? What actions by members of the firearms industry gave rise to that lawsuit? What actions by members of the firearms industry would prevent the filing of such a lawsuit against them, and who determined those parameters for withholding suit?

Answer. No lawsuit on behalf of the Department is contemplated.

Question. What HUD resources—financial or personnel—have been spent in preparing such a lawsuit or pursuing negotiations with the firearms industry, and what is the estimated cost to federal taxpayers of pursuing these activities?

Answer. While HUD has spent no resources preparing to file suit on the Department's behalf, as noted above, the Department has been involved in assisting cities and counties that have filed suit against the gun industry reach common ground with the industry, thereby helping to bring the litigation to a close. The March 17, 2000 settlement with Smith & Wesson was the first fruit of that effort. In terms of resources, HUD has devoted staff time and related expenses (travel, phone, office supplies, etc.) maintaining contact with both sides and assisting in negotiations.

Question. What other agency or agencies of the federal government has HUD consulted with about such a lawsuit or negotiations?

Answer. HUD has consulted with the White House, the Justice Department, and the Department of Treasury in the course of assisting with negotiations.

Question. What mission of HUD do these activities serve, and where is that mission stated in writing?

Answer. In the Department's enabling statute, Congress made clear that HUD was created in part "to encourage the solution of problems of housing, urban development, and mass transportation through State, county, town, village, or other local and private action." 42 U.S.C. § 3531 (1999). Given the awful toll of gun violence in our nation's communities, particularly those at the core of HUD's mission, helping cities and counties seek improved gun safety and more responsible distribution through negotiations with the gun industry, is a prime example of such encouragement. Moreover, reducing gun violence is at the core of HUD's responsibility for promoting national housing policy. The Housing Act of 1949, for example, declared as national housing policy "the realization as soon as feasible of the goal of a decent home and a suitable living environment for every American family," 42 U.S.C. 1441 (1999), and Congress has declared that the "objective of national housing policy shall be to reaffirm the long-established national commitment to decent, safe, and sanitary housing for every American by strengthening a nationwide partnership of public and private institutions able . . . to help make neighborhoods safe and livable." 42 U.S.C. § 12701 (1999).

Question. How much has HUD spent on gun turn-in program, cumulatively and by program?

Answer. Please see attached chart.

GUN BUYBACK PARTICIPANTS

Name of applicant	City	State	HA's GBB allocation	Eligible matching	HA allocation + match
HA of the City of Foley	Foley	AL	$1,000	$430	$1,430
Prichard HA	Prichard	AL	5,245	2,255	7,500
HA of the City of Talladega	Talladega	AL	2,000	860	2,860
HA of the City of Camden	Camden	AR	21,000	9,030	30,030
HA of City of Flagstaff	Flagstaff	AZ	3,500	1,505	5,005
San Francisco HA	San Francisco	CA	50,000	21,500	71,500
HA of the County of Marin	San Rafael	CA	3,000	1,290	4,290
The New Britain HA	New Britain	CT	5,000	2,150	7,150
HA of the City of Stamford	Stamford	CT	50,000	21,500	71,500
HA of the City of Meriden	Meriden	CT	5,000	2,150	7,150
HA of the City of Norwalk	S. Norwalk	CT	6,993	3,007	10,000
Hartford Housing Authority	Hartford	CT	10,000	4,300	14,300
District of Columbia HA	Washington	DC	70,000	30,100	100,100
Metro Dade Housing Agency	Miami	FL	50,000	21,500	71,500
Tampa HA	Tampa	FL	50,000	21,500	71,500
HA of Savannah	Savannah	GA	5,000	2,150	7,150
HA of Columbus, Georgia	Columbus	GA	17,500	7,525	25,025
HA of the City of Augusta	Augusta	GA	10,000	4,300	14,300

GUN BUYBACK PARTICIPANTS—Continued

Name of applicant	City	State	HA's GBB allocation	Eligible matching	HA allocation + match
HA of the City of Rome	Rome	GA	2,500	1,075	3,575
HA of the City of Cordele	Cordele	GA	6,500	2,795	9,295
HA City of Atlanta	Atlanta	GA	50,000	21,500	71,500
Hawaii Hsg. & Com. Dev. Corp	Honolulu	HW	25,000	10,750	35,750
Davenport HA	Davenport	IA	21,000		21,000
Rockford HA	Rockford	IL	14,000	6,020	20,020
Randolph County HA	Chester	IL	3,000	1,290	4,290
Chicago Housing Authority	Chicago	IL	100,000	43,000	143,000
HA of City of Gary, Indiana	Gary	IN	5,000	2,150	7,150
HA of City of Hammond	Hammond	IN	4,000	1,720	5,720
Jeffersonville HA	Jeffersonville	IN	1,400	602	2,002
Kansas City, Kansas HA	Kansas City	KS	30,000	12,900	42,900
Lexington-Fayette HA	Lexington	KY	100,000	43,000	143,000
HA of Princeton	Princeton	KY	2,000	860	2,860
HA of Columbia	Columbia	KY	800	344	1,144
HA of Louisville	Louisville	KY	20,000	8,600	28,600
HA of Frankfort	Frankfort	KY	2,000	860	2,860
Martin Housing Authority	Martin	KY	1,000	430	1,430
Springfield HA	Springfield	MA	15,000	6,450	21,450
Malden HA	Malden	MA	5,070	2,180	7,250
HA of Worcester	Worcester	MA	1,425	613	2,038
HA of Baltimore City	Baltimore	MD	200,000	86,000	286,000
HA of the City of Annapolis	Annapolis	MD	3,500	1,505	5,005
Inkster Housing Commission	Inkster	MI	40,500	17,415	57,915
Saginaw Hsg. Commission	Saginaw	MI	3,000	1,290	4,290
Flint Housing Commission	Flint	MI	70,000	30,100	100,100
City of Detroit Housing Department	Detroit	MI	15,000	6,450	21,450
River Rouge Housing Commission	River Rouge	MI	7,500	3,225	10,725
HA of the City of Hannibal	Hannibal	MO	7,000	3,010	10,010
Mississippi Regional HA VIII	Gulfport	MS	30,000	12,900	42,900
HA of High Point	High Point	NC	3,800	1,634	5,434
HA of City of Wilmington, NC	Wilmington	NC	10,000	4,300	14,300
HA of the City of Durham	Durham	NC	10,000	4,300	14,300
HA of Union City	Union City	NJ	10,000	4,300	14,300
HA City of Bayonne	Bayonne	NJ	3,750	1,613	5,363
Paterson HA	Paterson	NJ	6,300	2,709	9,009
Newark HA	Newark	NJ	500,000	215,000	715,000
HA of the City of Millville	Millville	NJ	4,700	2,021	6,721
HA of East Orange	East Orange	NJ	5,000	2,150	7,150
HA of the City of Orange	Orange	NJ	7,000	3,010	10,010
HA of Hoboken	Hoboken	NJ	5,000	2,150	7,150
HA of City of Las Cruces	Las Cruces	NM	10,000	4,300	14,300
Plattsburgh HA	Plattsburgh	NY	5,000	2,150	7,150
Albany HA	Albany	NY	5,000	2,150	7,150
Amsterdam HA	Amsterdam	NY	1,000	430	1,430
Schenectady Municipal HA	Schenectady	NY	800	344	1,144
The Mun. HA City of Yonkers	Yonkers	NY	10,000	4,300	14,300
Catskill HA	Catskill	NY	1,000	430	1,430
Cohoes HA	Cohoes	NY	2,000	860	2,860
Watervliet HA	Watervliet	NY	3,000	1,290	4,290
Lucas Metropolitian HA	Toledo	OH	35,000	15,050	50,050
Stark Metropolitian HA	Canton	OH	22,000	9,460	31,460
Easton HA	Easton	PA	2,000	860	2,860
Woonsocket HA	Woonsocket	RI	5,000	2,150	7,150
HA of the City of Pawtucket	Pawtucket	RI	18,000	7,740	25,740
HA of the City of Fort Mill	Fort Mill	SC	5,070	2,180	7,250
Beaufort HA	Beaufort	SC	2,000	860	2,860
Knoxville Com. Dev. Corp	Knoxville	TN	12,238	5,262	17,500
Memphis HA	Memphis	TN	50,000	21,500	71,500
Corpus Christi HA	Corpus Christi	TX	25,000	10,750	35,750
HA City of San Antonio	San Antonio	TX	25,416	10,929	36,345
HA of the City of El Paso	El Paso	TX	9,440	4,059	13,499
HA of the City of Monahans	Monahans	TX	5,000	2,150	7,150

GUN BUYBACK PARTICIPANTS—Continued

Name of applicant	City	State	HA's GBB allocation	Eligible matching	HA allocation + match
HA of the City of Laredo	Laredo	TX	5,000	2,150	7,150
HA City of Houston	Houston	TX	25,000	10,750	35,750
HA of Provo	Provo	UT	15,148	6,514	21,662
Roanoke Redevelopment HA	Roanoke	VA	15,000	6,450	21,450
Norfolk Redevelopment & HA	Norfolk	VA	5,000	2,150	7,150
Totals GBB			2,036,095	875,521	2,902,586

Question. How does HUD monitor the success of these programs in reducing crime?

Answer. HUD is currently in the process of establishing an evaluation mechanism to assess the current buyback initiative.

Question. How much has crime been reduced through these programs?

Answer. Again, HUD is planning an evaluation. It is important to remember, however, that buybacks by their nature are preventative measures that reduce the presence of unwanted firearms in a community, thereby reducing the supply of weapons potentially available to criminals.

Question. Were any other anti-crime efforts being pursued in the same areas simultaneously, and if so, what were they?

Answer. HUD's buyback initiative is part of a larger anti-crime and anti-drug abuse effort funded through the Public Housing Drug Elimination Program (PHDEP), which is, in turn, part of the Department's comprehensive public safety agenda. PHDEP was funded at $310 million in fiscal year 2000, supporting a broad spectrum of activities, including employment of security personnel, reimbursement of local police for additional security services, physical improvements to increase security, training and equipping voluntary tenant patrols, innovative anti-drug programs, and funding nonprofit resident management corporations and tenant councils to develop security and drug-abuse prevention programs.

INTOWN MANAGEMENT GROUP (ITMG)

Question. As mentioned, your agency recently negotiated with the Department of Justice to acquire funds to pay off liens placed on HUD owned homes as a result of HUD firing InTowm Management Group and transferring those accounts to Golden Feather Realty Services. Can you tell me what actions HUD is taking to insure that payments are received by all businesses, not just the larger subcontractors that worked with HUD and HUD's agents on a good faith basis?

Answer. The Department has a procedure in place for satisfying liens placed on HUD-owned properties by subcontractors who have not been paid by ITMG. Lien resolution questions may be referred to HUD's Atlanta Homeownership Center at (888) 696–4687 (this is a toll-free number). This procedure, along with the Department's replacement of ITMG, will keep sales of HUD homes moving forward efficiently so that home buyers may complete the purchase of their homes promptly.

The termination of the Management and Marketing prime contract under which subcontractors provided services was unavoidable. Termination of a contract is the most extreme action the Government can take to remedy a contractor's failure to perform. This was not the remedy HUD desired. HUD afforded ITMG every opportunity possible to correct its deficient performance, but in the end, ITMG's failure to perform acceptably left HUD with no other choice than to terminate ITMG's contracts. HUD did so in strict accordance with the Federal contracting rules that govern termination.

In lieu of filing a lien and seeking its satisfaction by HUD, a subcontractor may file a claim with the Atlanta Division of the Bankruptcy Court for Northern District of Georgia. ITMG filed a voluntary petition for a Chapter 11 Bankruptcy, with that court, on September 22, 1999. All payments will be governed by the regulations covering bankruptcies under the Federal court system. ITMG's petition is identified as Case Number 99–74091. For more information pertaining to the bankruptcy and how to proceed with filing a claim, subcontractors should call the Atlanta Division of the Bankruptcy Court at (404) 215–1000.

SOUTHEASTERN IDAHO COMMUNITY ACTION AGENCY

Question. I would also like to ask a few questions concerning SouthEastern Idaho Community Action Agency (SEICAA). As background, SEICAA has served its com-

munity for 31 years and is a vital link to providing safe, affordable housing in rural southeast Idaho. One of SEICAA's largest programs is our HUD Housing Apartment Complexes which they own, maintain, and rent to low-income individuals, families and elderly persons. However, their properties are older and are increasingly difficult to maintain, keep safe and sustain the required reserve accounts, pay their mortgages, repairs, preventative maintenance, etc. Because of the nature of their business, they occasionally turn to HUD for assistance in some of their sponsored programs, including Subsidy rent increase, Flexible Subsidy loan, and troubled project funding. However, SEICAA continually receives little communication, assistance, or direction from HUD as they struggle to maintain their HUD properties. SEICAA believes, and I am inclined to agree, that for the benefit of the people that are serving and the service they provide, they deserve HUD's timely attention and response to their inquires.

When can SEICAA and other similar struggling properties expect HUD personnel to respond to requests submitted for assistance and keep in compliance with HUD's own designated timeframes and regulations?

Answer. Efforts to improve customer service provided by federal employees has been a major effort for this Administration. HUD has a staff dedicated to precisely this function—Community Builders. The Community Builders have dramatically improved HUD's responsiveness. In fact, Anderson consulting surveyed HUD's customers and found that the agency was providing customer service at the level of Boldridge Quality Award winners—perhaps the most prestigious award a private business can receive. Ongoing outreach and technical assistance to HUD's program participants, like SEICCA, is a continuing mission through ongoing industry training sessions, our web sites, and points of contact who provide one on one technical assistance.

With the recent changes in how Section 8 contracts are renewed, some owners experienced difficulty providing the necessary information HUD now requires in order to renew subsidy or increase subsidy levels. With the last year of implementing new Section 8 renewal policy behind us, and, the advent of 5-year contract renewals, contract renewals should run much more smoothly.

In the specific case of problems encountered by SEICCA, they did experience difficulty and delay in renewing their Section 8 contract last year; it originally expired in July, 1999. In order to renew a Section 8 contract, HUD requires the renewal request to be complete and provided to HUD 120 days in advance of the contract expiration. When this is not done, as in the case of SEICCA, delays in subsidy renewal occur. In response to an inquiry from Senator Craig's staff regarding the delays in processing SEICCA's contract renewal in September of 1999, a letter was sent to SEICCA specifically outlining the deficiencies in their submission for both a subsidy increase and renewal, as well as their subsequent request for additional flexible subsidy to handle additional required repairs. Once the deficiencies in the submission were corrected, the Section 8 contract was renewed, with substantially higher rents.

REDUCING INTEREST RATES

Question. Will HUD consider reducing mortgage interest rates or mortgage elimination on struggling properties in order to increase cash flow for making emergency repairs, preventative maintenance and upkeep, retention of qualified employees to maintain the facilities, and to keep rents at an affordable level to qualified tenants?

Answer. Where HUD is the holder of a mortgage the answer is yes. HUD has many tools at its disposal that can be used to address such needs, including those mentioned. However, HUD has a fiduciary responsibility to the taxpayers to make sure it services each property in the taxpayers' best interests. Therefore, it is essential that each project be evaluated separately to determine what, if any, of the tools can or should be used in a particular case. HUD is not the only answer. Owners need to seek and maintain professional property management that select tenants properly, perform preventive maintenance promptly, and budget wisely but adequately.

Where HUD is mortgage insurer, there is a private lender involved who makes loans for a profit. We know of no private lender that would reduce interest rates or eliminate the need to repay the loan.

ONE-TIME GRANTS

Question. Will HUD consider making available sizeable one-time grants to bring properties up to safe and decent standards?

Answer. HUD has had authority over the years for various grant and loan programs. Funding for such programs as you describe lapsed several years ago.

HUD and the Congress saw the continuing need for such programs. The latest program, which should be available shortly, will provide grants for some projects using unspent Interest Reduction Payments from the Section 236 program.

INTERVENTION

Question. HUD has commitments to communities. Will HUD consider the very real probability that without timely, appropriate intervention, many of these properties will either be condemned, fall into serious disrepair, and/or require foreclosure reverting back to HUD?

Answer. HUD shares the Senator's concern for the community and the effects of maintaining affordable housing. This administration has taken several steps to do exactly as suggested to provide timely intervention. For example:

—We established the Real Estate Assessment Center (REAC). One of REAC's jobs is to implement a system of uniform physical evaluations of multifamily properties. In fact, we just completed the first ever evaluation of the physical condition of the entire multifamily inventory. Through REAC, we also automated the receipt of Audited Annual Financial Statements. We now have the best information ever on the financial condition of this inventory.

—We established the Departmental Enforcement Center (DEC). The DEC is responsible for enforcing the business documents between HUD and the worst offenders doing business with the Department.

—We are in the process of awarding contracts for Contract Administrators who will administer project-based Section 8 contracts.

—We reorganized the Office of Multifamily Housing in the field to improve servicing. We recently reorganized the Office of the Deputy Assistant Secretary for Multifamily Housing in Headquarters to improve overall management.

Also, foreclosure and or HUD ownership does not mean the loss of affordable housing. When properties are sold at foreclosure or from the owned inventory, if they need to be preserved as affordable housing, if feasible, they are sold with requirements that they be repaired, and operated as affordable housing. These requirements are enforced through land use restrictions that generally last at least 20 years. In addition, eligible tenants are provided with Section 8 vouchers, which they can use to stay at the repaired project, or move to another project or house.

HUD also uses its ability to provide Up Front Grants for HUD-owned projects that need to be preserved and preservation is not feasible without a grant from HUD. We have sold over 60 projects in the last few years with such grants.

So, while we would hope that no property ever would fall into disrepair, we are more prepared than ever to address such problems early on, and where such efforts fail, our foreclosure and disposition programs can and are used to address the problem.

QUESTIONS SUBMITTED BY SENATOR JON KYL

GUN CONTROL

Question. The Administration has not been successful in securing the passage of gun-control legislation. However, it has, through HUD, threatened a massive lawsuit against gun manufacturers (except for Smith & Wesson, which has now reached a separate agreement with the Department). Some believe that the Administration is attempting to achieve through litigation what it cannot achieve through the normal legislative process. What is the statutory or constitutional authority on which HUD intends to pursue lawsuits against the gun industry?

Answer. As the Department has stated on previous occasions, HUD has no intentions of filing a lawsuit in its own capacity against the gun industry. HUD, however, is working with cities and counties that have filed suit against the gun industry, as well as with responsible manufacturers, to find a negotiated solution that will facilitate the industry's role in reducing the tide of gun violence by fostering safer manufacturing and distribution practices. Should these negotiations prove unsuccessful, HUD is prepared to work with public housing authorities, including those under HUD's control, on a possible suit against the industry.

HUD has statutory authority, moreover, to provide such assistance, and to assist the cities and counties that have filed suit against the gun industry in their negotiations for settlement. In the Department's enabling statue, Congress made clear that HUD was created in part "to encourage the solution of problems of housing, urban development, and mass transportation through State, county, town, village, or other local and private action." 42 U.S.C. § 3531 (1999). Given the awful toll of gun violence in our nation's communities, particularly those at the core of HUD's mission,

helping cities and counties seek improved gun safety and more responsible distribution through negotiations with the gun industry, is a prime example of such encouragement. Moreover, reducing gun violence is at the core of HUD's responsibility for promoting national housing policy. The Housing Act of 1949, for example, declared as national housing policy "the realization as soon as feasible of the goal of a decent home and a suitable living environment for every American family," 42 U.S.C. § 1441 (1999), and Congress has declared that the "objective of national housing policy shall be to reaffirm the long-established national commitment to decent, safe, and sanitary housing for every American by strengthening a nationwide partnership of public and private institutions able(to help make neighborhoods safe and livable." 42 U.S.C. § 12701 (1999).

CIVIL RIGHT PROTECTIONS

Question. Every year, local leaders from Arizona express dissatisfaction with the degree to which HUD's interpretation of fair housing statutes impedes their ability to protect the quality of life in their communities. Such questions typically arise in circumstances where a community seeks to exercise control over the siting of a group home—perhaps one where all the residents have a history of serious substance abuse—pursuant to the locality's traditional prerogative to set occupancy standards. In response to previous inquiries on this subject, your office has indicated its willingness to seek a more satisfactory accommodation with local leaders. The mechanism cited for reaching that accommodation is, I gather from your past responses, a process of consultation bringing together all those with a stake in the matter.

I recognize the need to ensure that civil rights protections are enforced in the housing sphere. But my question to you is: When do you expect that these discussions will lead to concrete changes that will make it easier for local leaders to be responsive to the concerns of families in their communities?

Answer. We believe that our discussions with stakeholders such as Mayors, the National League of Cities, and disability groups have served to clarify any misunderstandings about HUD's interpretation of the Fair Housing Act on the matter of group homes. In some instances, we have found that the stakeholders' concern rests not with HUD's interpretation of the law, but with the law itself, or the Supreme Court's interpretation of the law as in the Edmonds decision. To clarify where HUD stands on these issues, HUD and the Department of Justice issued easy-to-understand questions and answers. A copy of that guidance is attached. The Department welcomes further dialogue on this subject and believes our recent dialogue with the above interested parties has done much to resolve areas of disagreement or misunderstanding.

ATTACHMENT

JOINT STATEMENT OF THE DEPARTMENT OF JUSTICE AND THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

GROUP HOMES, LOCAL LAND USE, AND THE FAIR HOUSING ACT

Since the federal Fair Housing Act ("the Act") was amended by Congress in 1988 to add protections for persons with disabilities and families with children, there has been a great deal of litigation concerning the Act's effect on the ability of local governments to exercise control over group living arrangements, particularly for persons with disabilities. The Department of Justice has taken an active Part in much of this litigation, often following referral of a matter by the Department of Housing and Urban Development ("HUD"). This joint statement provides an overview of the Fair Housing Act's requirements in this area. Specific topics are addressed in more depth in the attached Questions and Answers.

The Fair Housing Act prohibits a broad range of practices that discriminate against individuals on the basis of race, color, religion, sex, national origin, familial status, and disability.[1] The Act does not preempt local zoning laws. However, the Act applies to municipalities and other local government entities and prohibits them from making zoning or land use decisions or implementing land use policies that exclude or otherwise discriminate against protected persons, including individuals with disabilities.

The Fair Housing Act makes it unlawful—

[1] The Fair Housing Act uses the term "handicap." This document uses the term 'disability' which has exactly the same legal meaning.

—To utilize land use policies or actions that treat groups of persons with disabilities less favorably than groups of non-disabled persons. An example would be an ordinance prohibiting housing for persons with disabilities or a specific type of disability, such as mental illness, from locating in a particular area, while allowing other groups of unrelated individuals to live together in that area.
—To take action against, or deny a permit, for a home because of the disability of individuals who live or would live there. An example would be denying a building permit for a home because it was intended to provide housing for persons with mental retardation.
—To refuse to make reasonable accommodations in land use and zoning policies and procedures where such accommodations may be necessary to afford persons or groups of persons with disabilities an equal opportunity to use and enjoy housing.
  —What constitutes a reasonable accommodation is a case-by-case determination.
  —Not all requested modifications of rules or policies are reasonable. If a requested modification imposes an undue financial or administrative burden on a local government, or if a modification creates a fundamental alteration in a local governments land use and zoning scheme, it is not a "reasonable" accommodation.

The disability discrimination provisions of the Fair Housing Act do not extend to persons who claim to be disabled solely on the basis of having been adjudicated a juvenile delinquent, having a criminal record, or being a sex offender. Furthermore, the Fair Housing Act does not protect persons who currently use illegal drugs, persons who have been convicted of the manufacture or sale of illegal drugs, or persons with or without disabilities who present a direct threat to the persons or property of others.

HUD and the Department of Justice encourage parties to group home disputes to explore all reasonable dispute resolution procedures, like mediation, as alternatives to litigation.

DATE: AUGUST 18, 1999.

FAIR HOUSING ACT AND ZONING

Question. Does the Fair Housing Act pre-empt local zoning laws?

Answer. No. "Pre-emption" is a legal term meaning that one level of government has taken over a field and left no room for government at any other level to pass laws or exercise authority in that area. The Fair Housing Act is not a land use or zoning statute; it does not pre-empt local land use and zoning laws. This is an area where state law typically gives local governments primary power. However, if that power is exercised in a specific instance in a way that is inconsistent with a federal law such as the Fair Housing Act, the federal law will control. Long before the 1988 amendments, the courts had held that the Fair Housing Act prohibited local governments from exercising their land use and zoning powers in a discriminatory way.

Question. What is a group home within the meaning of the Fair Housing Act?

Answer. The term "group home" does not have a specific legal meaning. In this statement, the term "group home" refers to housing occupied by groups of unrelated individuals with disabilities.[2] Sometimes, but not always, housing is provided by organizations that also offer various services for individuals with disabilities living in the group homes. Sometimes it is this group home operator, rather than the individuals who live in the home, that interacts with local government in seeking permits and making requests for reasonable accommodations on behalf of those individuals.

The term "group home" is also sometimes applied to any group of unrelated persons who live together in a dwelling—such as a group of students who voluntarily agree to share the rent on a house. The Act does not generally affect the ability of local governments to regulate housing of this kind, as long as they do not discriminate against the residents on the basis of race, color, national origin, religion, sex, handicap (disability) or familial status (families with minor children).

Question. Who are persons with disabilities within the meaning of the Fair Housing Act?

Answer. The Fair Housing Act prohibits discrimination on the basis of handicap. "Handicap" has the same legal meaning as the term "disability" which is used in other federal civil rights laws. Persons with disabilities (handicaps) are individuals with mental or physical impairments which substantially limit one or more major

[2] There are groups of unrelated persons with disabilities who choose to live together who do not consider their living arrangements "group homes," and it is inappropriate to consider them "group homes" as that concept is discussed in this Statement.

life activities. The term mental or physical impairment may include conditions such as blindness, hearing impairment, mobility impairment, HIV infection, mental retardation, alcoholism, drug addiction, chronic fatigue, learning disability, head injury, and mental illness. The term major life activity may include seeing, hearing, walking, breathing, performing manual tasks, caring for one's self, learning, speaking, or working. The Fair Housing Act also protects persons who have a record of such an impairment, or are regarded as having such an impairment.

Current users of illegal controlled substances, persons convicted for illegal manufacture or distribution of a controlled substance, sex offenders, and juvenile offenders, are not considered disabled under the Fair Housing Act, by virtue of that status.

The Fair Housing Act affords no protections to individuals with or without disabilities who present a direct threat to the persons or property of others. Determining whether someone poses such a direct threat must be made on an individualized basis, however, and cannot be based on general assumptions or speculation about the nature of a disability.

Question. What kinds of local zoning and land use laws relating to group homes violate the Fair Housing Act?

Answer. Local zoning and land use laws that treat groups of unrelated persons with disabilities less favorably than similar groups of unrelated persons without disabilities violate the Fair Housing Act. For example, suppose a city's zoning ordinance defines a "family" to include up to six unrelated persons living together as a household unit, and gives such a group of unrelated persons the right to live in any zoning district without special permission. If that ordinance also disallows a group home for six or fewer people with disabilities in a certain district or requires this home to seek a use permit, such requirements would conflict with the Fair Housing Act. The ordinance treats persons with disabilities worse than persons without disabilities.

A local government may generally restrict the ability of groups of unrelated persons to live together as long as the restrictions are imposed on all such groups. Thus, in the case where a family is defined to include up to six unrelated people, an ordinance would not, on its face, violate the Act if a group home for seven people with disabilities was not allowed to locate in a single family zoned neighborhood, because a group of seven unrelated people without disabilities would also be disallowed. However, as discussed below, because persons with disabilities are also entitled to request reasonable accommodations in rules and policies, the group home for seven persons with disabilities would have to be given the opportunity to seek an exception or waiver. If the criteria for reasonable accommodation are met, the permit would have to be given in that instance. but the ordinance would not be invalid in all circumstances.

Question. What is a reasonable accommodation under the Fair Housing Act?

Answer. As a general rule, the Fair Housing Act makes it unlawful to refuse to make "reasonable accommodations" (modifications or exceptions) to rules, policies, practices, or services, when such accommodations may be necessary to afford persons with disabilities an equal opportunity to use or enjoy a dwelling.

Even though a zoning ordinance imposes on group homes the same restrictions it imposes on other groups of unrelated people, a local government may be required, in individual cases and when requested to do so, to grant a reasonable accommodation to a group home for persons with disabilities. For example, it may be a reasonable accommodation to waive a setback requirement so that a paved path of travel can be provided to residents who have mobility impairments. A similar waiver might not be required for a different type of group home where residents do not have difficulty negotiating steps and do not need a setback in order to have an equal opportunity to use and enjoy a dwelling.

Not all requested modifications of rules or policies are reasonable. Whether a particular accommodation is reasonable depends on the facts, and must be decided on a case-by-case basis. The determination of what is reasonable depends on the answers to two questions: First, does the request impose an undue burden or expense on the local government? Second, does the proposed use create a fundamental alteration in the zoning scheme? If the answer to either question is "yes," the requested accommodation is unreasonable.

What is "reasonable" in one circumstance may not be "reasonable" in another. For example, suppose a local government does not allow groups of four or more unrelated people to live together in a single-family neighborhood. A group home for four adults with mental retardation would very likely be able to show that it will have no more impact on parking, traffic, noise, utility use, and other typical concerns of zoning than an "ordinary family." In this circumstance, there would be no undue burden or expense for the local government nor would the single-family character

of the neighborhood be fundamentally altered. Granting an exception or waiver to the group home in this circumstance does not invalidate the ordinance. The local government would still be able to keep groups of unrelated persons without disabilities from living in single-family neighborhoods.

By contrast, a fifty-bed nursing home would not ordinarily be considered an appropriate use in a single-family neighborhood, for obvious reasons having nothing to do with the disabilities of its residents. Such a facility might or might not impose significant burdens and expense on the community, but it would likely create a fundamental change in the single-family character of the neighborhood. On the other hand, a nursing home might not create a "fundamental change" in a neighborhood zoned for multi-family housing. The scope and magnitude of the modification requested, and the features of the surrounding neighborhood are among the factors that will be taken into account in determining whether a requested accommodation is reasonable.

Question. What is the procedure for requesting a reasonable accommodation?

Answer. Where a local zoning scheme specifies procedures for seeking a departure from the general rule, courts have decided, and the Department of Justice and HUD agree, that these procedures must ordinarily be followed. If no procedure is specified, persons with disabilities may, nevertheless, request a reasonable accommodation in some other way, and a local government is obligated to grant it if it meets the criteria discussed above. A local government's failure to respond to a request for reasonable accommodation or an inordinate delay in responding could also violate the Act

Whether a procedure for requesting accommodations is provided or not, if local government officials have previously made statements or otherwise indicated that an application would not receive fair consideration, or if the procedure itself is discriminatory, then individuals with disabilities living in a group home (and/or its operator) might be able to go directly into court to request an order for an accommodation.

Local governments are encouraged to provide mechanisms for requesting reasonable accommodations that operate promptly and efficiently, without imposing significant costs or delays. The local government should also make efforts to insure that the availability of such mechanisms is well known within the community.

Question. When, if ever, can a local government limit the number of group homes that can locate In a certain area?

Answer. A concern expressed by some local government officials and neighborhood residents is that certain jurisdictions, governments, or particular neighborhoods within a jurisdiction, may come to have more than their "fair share" of group homes. There are legal ways to address this concern. The Fair Housing Act does not prohibit most governmental programs designed to encourage people of a particular race to move to neighborhoods occupied predominantly by people of another race. A local government that believes a particular area within its boundaries has its "fair share" of group homes, could offer incentives to providers to locate future homes in other neighborhoods.

However, some state and local governments have tried to address this concern by enacting laws requiring that group homes be at a certain minimum distance from one another. The Department of Justice and HUD take the position, and most courts that have addressed the issue agree, that density restrictions are generally inconsistent with the Fair Housing Act. We also believe, however. that if a neighborhood came to be composed largely of group homes, that could adversely affect individuals with disabilities and would be inconsistent with the objective of integrating persons with disabilities into the community. Especially in the licensing and regulatory process, it is appropriate to be concerned about the setting for a group home. A consideration of over-concentration could be considered in this context. This objective does not, however, justify requiring separations which have the effect of foreclosing group homes from locating in entire neighborhoods.

Question. What kinds of health and safety regulations can be imposed upon group homes?

Answer. The great majority of group homes for persons with disabilities are subject to state regulations intended to protect the health and safety of their residents. The Department of Justice and HUD believe, as do responsible group home operators, that such licensing schemes are necessary and legitimate. Neighbors who have concerns that a particular group home is being operated inappropriately should be able to bring their concerns to the attention of the responsible licensing agency. We encourage the States to commit the resources needed to make these systems responsive to resident and community needs and concerns.

Regulation and licensing requirements for group homes are themselves subject to scrutiny under the Fair Housing Act. Such requirements based on health and safety

concerns can be discriminatory themselves or may be cited sometimes to disguise discriminatory motives behind attempts to exclude group homes from a community. Regulators must also recognize that not all individuals with disabilities living in group home settings desire or need the same level of services or protection. For example, it may be appropriate to require heightened fire safety measures in a group home for people who are unable to move about without assistance. But for another group of persons with disabilities who do not desire or need such assistance, it would not be appropriate to require fire safety measures beyond those normally imposed on the size and type of residential building involved.

Question. Can a local government consider the feelings of neighbors in making a decision about granting a permit to a group home to locate in a residential neighborhood?

Answer. In the same way a local government would break the law if it rejected low-income housing in a community because of neighbors' fears that such housing would be occupied by racial minorities, a local government can violate the Fair Housing Act if it blocks a group home or denies a requested reasonable accommodation in response to neighbors' stereotypical fears or prejudices about persons with disabilities. This is so even if the individual government decision-makers are not themselves personally prejudiced against persons with disabilities. If the evidence shows that the decision-makers were responding to the wishes of their constituents, and that the constituents were motivated in substantial part by discriminatory concerns, that could be enough to prove a violation.

Of course, a city council or zoning board is not bound by everything that is said by every person who speaks out at a public hearing. It is the record as a whole that will be determinative. If the record shows that there were valid reasons for denying an application that were not related to the disability of the prospective residents, the courts will give little weight to isolated discriminatory statements. If, however, the purportedly legitimate reasons advanced to support the action are not objectively valid, the courts are likely to treat them as pretextual, and to find that there has been discrimination.

For example, neighbors and local government officials may be legitimately concerned that a group home for adults in certain circumstances may create more demand for on-street parking than would a typical family. It is not a violation of the Fair Housing Act for neighbors or officials to raise this concern and to ask the provider to respond. A valid unaddressed concern about inadequate parking facilities could justify denying the application, if another type of facility would ordinarily be denied a permit for such parking problems. However, if a group of individuals with disabilities or a group home operator shows by credible and unrebutted evidence that the home will not create a need for more parking spaces, or submits a plan to provide whatever off-street parking may be needed, then parking concerns would not support a decision to deny the home a permit.

Question. What is the status of group living arrangements for children under the Fair Housing Act?

Answer. In the course of litigation addressing group homes for persons with disabilities, the issue has arisen whether the Fair Housing Act also provides protections for group living arrangements for children. Such living arrangements are covered by the Fair Housing Act's provisions prohibiting discrimination against families with children. For example, a local government may not enforce a zoning ordinance which treats group living arrangements for children less favorably than it treats a similar group living arrangement for unrelated adults. Thus, an ordinance that defined a group of up to six unrelated adult persons as a family, but specifically disallowed a group living arrangement for six or fewer children, would, on its face, discriminate on the basis of familial status. Likewise, a local government might violate the Act if it denied a permit to such a home because neighbors did not want to have a group facility for children next to them.

The law generally recognizes that children require adult supervision. Imposing a reasonable requirement for adequate supervision in group living facilities for children would not violate the familial status provisions of the Fair Housing Act.

Question. How are zoning and land use matters handled by HUD and the Department of Justice?

Answer. The Fair Housing Act gives the Department of Housing and Urban Development the power to receive and investigate complaints of discrimination, including complaints that a local government has discriminated in exercising its land use and zoning powers. HUD is also obligated by statute to attempt to conciliate the complaints that it receives, even before it completes an investigation.

In matters involving zoning and land use, HUD does not issue a charge of discrimination. Instead, HUD refers matters it believes may be meritorious to the Department of Justice which, in its discretion, may decide to bring suit against the

respondent in such a case. The Department of Justice May also bring suit in a case that has not been the subject of a HUD complaint by exercising its power to initiate litigation alleging a "pattern or practice" of discrimination or a denial of rights to a group of persons which raises an issue of general public importance.

The Department of Justice's principal objective in a suit of this kind is to remove significant barriers to the housing opportunities available for persons with disabilities. The Department ordinarily will not participate in litigation to challenge discriminatory ordinances which are not being enforced, unless there is evidence that the mere existence of the provisions are preventing or discouraging the development of needed housing.

If HUD determines that there is no reasonable basis to believe that there may be a violation, it will close an investigation without referring the matter to the Department of Justice. Although the Department of Justice would still have independent "pattern or practice" authority to take enforcement action in the matter that was the subject of the closed HUD investigation, that would be an unlikely event. A HUD or Department of Justice decision not to proceed with a zoning or land use matter does not foreclose private plaintiffs from pursuing a claim.

Litigation can be an expensive, time-consuming, and uncertain process for all parties. HUD and the Department of Justice encourage parties to group home disputes to explore all reasonable alternatives to litigation, including alternative dispute resolution procedures, like mediation. HUD attempts to conciliate all Fair Housing Act complaints that it receives. In addition, it is the Department of Justice's policy to offer prospective defendants the opportunity to engage in pre-suit settlement negotiations, except in the most unusual circumstances.

LETTER FROM JOHN A. MAGAGNA AND KENNETH H. ZIMMERMAN

AUGUST 13, 1999.

CHAI R. FELDBLUM,
Georgetown University Law Center,
Washington, D.C.

DEAR MS. FELDBLUM: We are writing to provide you with the Joint Statement that the Department of Justice and the Department of Housing and Urban Development have developed concerning Group Homes, Local Land Use, and the Fair Housing Act.

We are aware of the interest that the United States Conference of mayors, the National League of Cities, the Coalition to Preserve the Fair Housing Act, and other interested parties have expressed in such guidance from the federal agencies with responsibility for enforcing the Fair Housing Act. We would he happy to meet with you in the near future to discuss this statement and your own efforts to provide further information concerning these issues.

Thank you for your ongoing interest in these issues. We look forward to working with you further.

Sincerely,

JOHN A. MAGAGNA,
Chief, Housing and Civil Enforcement Section, Civil Rights Division, U.S. Department of Justice.

KENNETH H. ZIMMERMAN,
Deputy Assistant Secretary for Enforcement and Programs, U.S. Department of Housing and Urban Development.

SHELTER PLUS CARE

Question. Shelter Plus Care is one of the federal Homeless Assistance Programs authorized under the McKinney Act. Under this specific program, the federal government funds permanent housing for some of the most troubled among the homeless population—particularly individuals with serve mental illnesses—and local governments provide social services for those residents. Shelter Plus Care projects initially receive five years of funding. After that, these programs must compete with other projects that serve the homeless. Local governments decide which projects will be funded, but the standards they use are guided by HUD's "Continuum of Care" framework.

Last year, expiring Shelter Plus Care projects serving 885 people went unrenewed. A disproportionate share of these are in Maricopa County, Arizona. I recognize that HUD has proposed a fix for this situation in the fiscal year 2001 budget, but the fact is that Congress has been left to try to address the problem that currently exists. In light of these circumstances, and in light of the fact that we will likely see more projects going unrenewed in the next few years, do you be-

lieve that the "Continuum of Care" model could be improved to better address the varied needs of communities working to address the problems of homeless people?

Answer. In the 1999 competition, 79 percent of all Shelter Plus Care renewal funding requests were approved for a total of $87.2 million and representing 3,527 funded beds.

Shelter Plus Care renewal requests are not spread proportionately among jurisdictions but are driven by local needs and timing considerations which vary considerably from place to place. In the 1999 competition, Maricopa County had three of its four Shelter Plus Care renewal requests funded, $10,721,760 out of the $13,752,900 requested. The continuum of care competition provides additional funds to communities with large renewal burdens and Maricopa benefited from this adjustment in 1999. Only one other continuum in the country received more Shelter Plus Care renewal funding—Cuyahoga County, Ohio. Maricopa assigned its four S+C renewals priority numbers 17 to 20 out of the 23 projects submitted. Maricopa Country had sufficient funds available to it in the competition, approximately $15 million, to have had all four of its Shelter Plus Care renewals funded, if they had decided to do so, by assigning them a higher priority.

With or without a continuum of care system, the only way of ensuring the continuation of homeless assistance projects deemed essential to our communities, such as those in Maricopa County, is to fully fund them through an annual appropriations bill. The Department has proposed just such a vehicle for the funding of Shelter Plus Care renewals through the Section 8 Housing Certificate Fund. We strongly urge that Shelter Plus Care permanent housing project renewals be funded in this manner going forward. This will strengthen the continuum of care process and the communities and residents it is intended to serve.

SHORTAGE OF AFFORDABLE HOUSING

Question. Mr. Secretary, the shortage of affordable housing in this country is truly a crisis. The tight rental market and the high cost of housing in Vermont is severely limiting the availability of affordable housing throughout the state. I am concerned that the high housing costs and limited availability are not only aggravating the need of low income families, but putting middle income families out in the streets. What is your Department's response to the rising housing costs throughout the country and how does your department intend to spur production of new housing?

Answer. Senator, I couldn't agree with you more. The need for increasing the supply of affordable housing has reached crisis proportions—HUD's recent report on "worst case" housing needs found a record 5.4 million American families are in urgent need of affordable housing. The Department is moving on a number of fronts to address this problem. A key program proposal to foster affordable housing production is the Department's proposal to increase funding for Housing Vouchers and to earmark 10,000 vouchers for housing production—the first new affordable housing production program for families since 1996.

HUD's HOME program provides funding to state and local governments to help them acquire, rehabilitate or build affordable housing and the Administration has proposed an innovative "continuum of care" program that would ensure that the full range of housing needs of the elderly—from maintaining their own homes to assisted living—are provided. And I should emphasize the Department's efforts to provide affordable housing for people with special needs—especially the homeless and people with AIDS.

GUN CONTROL

Question. The Administration has not been successful in securing the passage of gun-control legislation. However, it has, through HUD, threatened a massive lawsuit against gun manufacturers (except for Smith & Wesson, which has now reached a separate agreement with the Department). Some believe that the Administration is attempting to achieve through litigation what it cannot achieve through the normal legislative process. What is the statutory or constitutional authority on which HUD intends to pursue lawsuits against the gun industry?

Answer. As the Department has stated on previous occasions, HUD has no intentions of filing a lawsuit in its own capacity against the gun industry. HUD, however, is working with cities and counties that have filed suit against the gun industry, as well as with responsible manufacturers, to find a negotiated solution that will facilitate the industry's role in reducing the tide of gun violence by fostering safer manufacturing and distribution practices. Should these negotiations prove unsuccessful, HUD is prepared to work with public housing authorities, including those under HUD's control, on a possible suit against the industry.

HUD has statutory authority, moreover, to provide such assistance, and to assist the cities and counties that have filed suit against the gun industry in their negotiations for settlement. In the Department's enabling statue, Congress made clear that HUD was created in part "to encourage the solution of problems of housing, urban development, and mass transportation through State, county, town, village, or other local and private action." 42 U.S.C. 3531 (1999). Given the awful toll of gun violence in our nation's communities, particularly those at the core of HUD's mission, helping cities and counties seek improved gun safety and more responsible distribution through negotiations with the gun industry, is a prime example of such encouragement. Moreover, reducing gun violence is at the core of HUD's responsibility for promoting national housing policy. The Housing Act of 1949, for example, declared as national housing policy "the realization as soon as feasible of the goal of a decent home and a suitable living environment for every American family," 42 U.S.C. § 1441 (1999), and Congress has declared that the "objective of national housing policy shall be to reaffirm the long-established national commitment to decent, safe, and sanitary housing for every American by strengthening a nationwide partnership of public and private institutions able . . . to help make neighborhoods safe and livable." 42 U.S.C. § 12701 (1999).

SUBCOMMITTEE RECESS

Senator MIKULSKI. With that, this hearing now stands recessed until next Thursday, April 6, at such time as we will take testimony from Secretary Togo West on the VA budget.

[Whereupon, at 11:56 a.m., Thursday, March 30, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENTS OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT AND INDEPENDENT AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

THURSDAY, APRIL 6, 2000

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

The subcommittee met at 9:30 a.m., in room SD–136, Dirksen Senate Office Building, Hon. Christopher S. Bond (chairman) presiding.

Present: Senators Burns, Mikulski, and Leahy.

DEPARTMENT OF VETERANS AFFAIRS

STATEMENT OF HON. TOGO D. WEST, JR., SECRETARY

ACCOMPANIED BY:

THOMAS L. GARTHWAITE, M.D., DEPUTY UNDER SECRETARY FOR HEALTH, VETERANS HEALTH ADMINISTRATION

JOSEPH THOMPSON, UNDER SECRETARY FOR BENEFITS, VETERANS BENEFITS ADMINISTRATION

MICHAEL WALKER, ACTING UNDER SECRETARY FOR MEMORIAL AFFAIRS, NATIONAL CEMETERY ADMINISTRATION

D. MARK CATLETT, DEPUTY ASSISTANT SECRETARY FOR BUDGET, DEPARTMENTAL ADMINISTRATION

OPENING STATEMENT OF SENATOR CHRISTOPHER S. BOND

Senator BOND. Good morning, ladies and gentlemen. The Subcommittee will come to order. We meet this morning to review the fiscal year 2001 budget request of the Department of Veterans Affairs. We welcome Secretary Togo West and other VA officials. Senator Mikulski is here but she was called away temporarily, so she suggested that I go on, because we do have a couple of votes beginning at 10:30, and with the budget and vote-arama going on, we don't know if we're going to be able to give you the full treatment, Mr. Secretary, and I know that you're going to miss that if we're unable to come back; but we will keep the record open and have questions for the record.

VA's appropriation request totals about $47 billion of which $22.4 billion is in the discretionary appropriations level. The budget would grow by $1.5 billion over the fiscal year 2000 level under the proposal submitted by the administration.

A year ago, VA submitted a request to Congress which would have resulted in 13,000 VA health care workers being laid off,

thousands of veterans being denied medical care, longer waiting times for appointments, and closures of scores of programs for such critical activities as substance abuse treatment, cancer therapy, psychiatric treatment and cardiac surgery.

Despite the fact that the Vice-President announced in July the administration would request an additional $1 billion for medical care, we never received a budget amendment or any request from the administration. Notwithstanding the administration's failure to be responsive, after a long hot summer and a lot of hard work we came up with a budget for the Department which increased medical care by $1.7 billion. I think everyone in the room will agree it was the right thing to do to ensure high quality, accessible medical services to all veterans seeking care at the VA.

VA'S MEDICAL CARE PROGRAM

It seems the administration finally saw the light, as this year's budget proposal would increase medical care by $1.35 billion for a total of $20.3 billion. I congratulate you, Mr. Secretary, in getting the White House to come to its senses and recognize the importance of this vital program for veterans.

We are pleased the budget includes $548 million to implement the new Millennium Act, increasing by $278 million the funds for home and community-based care. These programs are vitally important for our growing aging veteran population. The new emphasis on home-based services should allow more veterans to stay in their homes, surrounded by their family members, as long as possible.

While we're on the issue of long-term care, let me say I have become increasingly concerned about the quality of care provided to our nation's elderly and nursing homes. A recent audit in Missouri and several GAO reports indicate there are serious and well-documented problems in the nation's nursing home system, suggesting that inexcusable regulatory lapses have occurred. VA has established a process to ensure that veterans it places in community nursing homes are receiving good care, through regular inspections and evaluations. Yet it is my understanding that VA is neither systematically maintaining nor sharing critical information with HCFA and State agencies about the community homes with which it contracts. We will be following up with you on this issue because I think this is one area where VA could make a significant contribution and benefit from the work done by HCFA and State inspection agencies as well.

The budget also includes $339 million to continue to treat veterans who suffer from Hepatitis C. Last year, Dr. Kizer told us that Hepatitis C was a problem of epidemic proportion among the veteran population in particular, and we seek to ensure that the Department is allocating funds appropriately, screening all at-risk patients and treating all veterans who can benefit from the new combination therapy.

While Dr. Kizer spoke last year about the need for as much as $500 million for treating veterans with Hepatitis C, your budget indicates only $195 million will be spent in fiscal year 2000. More disturbing, recent data from the field indicates far less than this

is being spent this year. We need to understand why this is happening.

I note there is a new initiative in this year's budget which you've dubbed 30–30–20—I understand it has nothing to do with the old 30–20–10 initiative—aimed at improving access to care and decreasing waiting times. This is an admirable goal; we all have scores of stories from our constituents about their having to wait for weeks or even months to get an appointment and then waiting for hours to see the doctor the day of the appointment. I look forward to hearing details about how VA will improve this situation.

Another emphasis in VA's budget is patient safety, with $137 million in initiatives aimed at patient safety improvements. This is an extremely important issue, and while VA has been a leader in certain aspects of ensuring the safety of its patients, such as the bar coding system for medications and the patient safety registry, VA, along with all health care providers, has a long way to go. Anytime there are instances of patient abuse, neglect or mistakes, there's much work to be done. VA must ensure that all of its facilities are following VA's patient safety policies and procedures, and that there is strong and consistent leadership.

Another area I am interested in is VA's homeless programs. We increased these programs by $40 million last year, and the budget proposal would maintain current levels of spending. I'm concerned that while we're spending a lot of money on these programs, there seems to be insufficient coordination within VA and with a myriad of other Federal agency programs serving homeless. Also, there seems to be a great deal of variation from one VA hospital to the next in terms of how much priority is placed on helping homeless veterans.

If helping homeless veterans is a national priority for VA, and it absolutely should be, we need to be confident that it is a priority at each of the 22 networks and each of the 172 VA hospitals. Anecdotal evidence coming to us suggests that it is not.

Fortunately, VA has efforts underway to identify and link services between homeless veterans and VA medical and other supportive services. This is a good thing, but the Department needs also to recognize the importance of preventing its patients from becoming homeless. The point is very important in view of the fact that substantial numbers of homeless vets are treated in every VA medical center.

CAPITAL ASSET REALIGNMENT PROTOCOL

Moving on, I also have concerns about VA's progress in developing the capital asset realignment protocol. GAO told us last year that the VA was wasting $1 million a day on unneeded buildings, and that only 25 percent of buildings in the VA medical system are being used for direct patient care. So it is important that VA move forward with capital asset planning and market studies, and in a manner which protects veteran's needs but does not enable stakeholders to hijack the process.

Mr. Secretary, you have to have direct involvement in this and push this forward; this is not something that is going to happen. It is pushing a rock up a hill, but that rock has to go up the hill.

Clearly everyone who has an interest—veterans, employees, the medical schools—need to be at the table and contributing to the process. But the stakeholder process that I've witnessed too often is like trying to load frogs in a wheelbarrow. You get a couple in, and when you go out to look for the others, the ones you put in at first jump out. That's what we've seen in Chicago, and we absolutely cannot repeat this process in other market studies.

According to GAO testimony, which will be inserted in the record today, "VHA's process, as currently designed, raised concerns about whether the right people are involved at the right times in the right ways." GAO's assessment is that VA has not learned any lesson from the Chicago capital asset realignment study and that the process as currently structured will not lead to timely, appropriate capital investment decisions that are in the best interests of veterans and taxpayers.

[The information follows:]

[General Account Office, April 6, 2000]

VA IS STRUGGLING TO RESPOND TO ASSET REALIGNMENT CHALLENGES

(By Stephen P. Backhus)

Mr. Chairman and Members of the Subcommittee: We are pleased to contribute this statement for the record for the Subcommittee's deliberations on the fiscal year 2001 budget request for the Department of Veterans Affairs (VA). It discusses the management of VA's health care assets that are operated by the Veterans Health Administration (VHA). VHA has primary responsibility for capital asset planning activities, whereas VA's Capital Investment Board has primary responsibility for capital budgeting activities, including review of VHA's capital investment proposals.

Between its establishment in 1946 and 1995, VHA's health care system grew into our nation's largest direct provider of health care, serving veterans at over 600 locations nationwide. In October 1995, VHA began to transform its system from a hospital operator to a health care provider that relies on community-based, integrated networks of VA and non-VA providers to meet veterans' needs.

Over the next few years, VHA will spend billions of dollars operating, maintaining, and improving buildings and land at health care delivery locations nationwide. Currently, VA's health care capital assets total over 4,700 buildings and 18,000 acres of land at 181 major delivery locations.

In March 1999, we reported that VHA could enhance veterans' health care benefits if it reduced the level of resources spent on underused, inefficient, or obsolete buildings and reinvested these savings in providing health care more efficiently in modern facilities at existing locations or new locations closer to where the veterans live.[1]

VHA agreed in general with our evaluation and committed at that time to taking the steps needed to realign its portfolio of health care assets. In essence, VHA agreed to implement in a timely manner a strategic planning process that systematically studies all its medical care markets in order to develop capital asset realignment plans.[2] VA's Capital Investment Board will use these plans to determine the best investment opportunities.

Last April we reported to this Subcommittee that VHA's transformation had made significant progress, although it appeared to be losing momentum. We concluded that VHA's transformation could not be successfully completed until VHA had addressed its greatest management challenge: realigning its massive portfolio of aged capital assets.[3]

Last July we reported that VHA had made limited progress toward implementing a realignment process and estimated the opportunity cost of delay was as high as

[1] VA Health Care: Capital Asset Planning and Budgeting Need Improvement(GAO/T–HEHS–99–83, Mar. 10, 1999).

[2] A market, for the purposes of this statement, is defined as a geographic area generally within 75 miles of an existing VHA major delivery location.

[3] Veterans' Affairs: Progress and Challenges in Transforming Health Care (GAO/T–HEHS–99–109, Apr. 15, 1999).

$1 million a day.[4] VHA's efforts had focused primarily on discussions among VHA officials, VA officials, and stakeholders, such as veterans' service organizations, regarding a conceptual framework for its asset realignment process. VHA reported at that time that its realignment process would be operational within 2 months (September 1999).[5] Our statement today (1) assesses VHA's progress to date, (2) identifies concerns regarding VHA's realignment process, and (3) examines the potential effects of VHA's actions on VA's capital budgeting process.

My comments this morning are based on discussions with officials responsible for VHA's asset realignment and VA's capital budgeting processes and reviews of documents, primarily those relating to VHA's proposed asset realignment procedures and VA's Capital Investment Board decisions concerning VHA investment proposals considered for funding in fiscal year 2001.

In summary, VHA has been unsuccessful over the past 13 months in its efforts to design a capital asset realignment process. VHA's efforts have focused on discussions of who should lead such a process, how stakeholders should participate, and how decisions are to be made. Moreover, VHA estimates, as it did 8 months ago, that it could be several months before its process is operational.

Our assessment of VHA's process, as currently designed, raises concerns about whether the right people are involved at the right times and in the right ways. Specifically, senior managers at headquarters may not be proactively involved in a leadership role at key decision points. In addition, stakeholders with vested interests appear to be involved in decision-making, rather than advisory, roles. And activities supporting key components, such as options development and evaluation, are not sufficiently rigorous. As a result, VHA may not be able to produce within a reasonable time frame capital asset plans that are in the best interest of veterans.

VHA's slow progress creates dilemmas for VA's capital budgeting process. In the short term, VHA and VA's Capital Investment Board face the challenge of maintaining and improving capital assets without sufficient information about future asset needs to ensure cost-effective capital investment decisions. By contrast, if funding for projects is delayed until capital asset plans are completed, the longer-term challenge will be how to successfully finance and implement capital realignment investments potentially totaling billions of dollars. These challenges could be ameliorated, in part, if VA effectively manages short-term investment risks and the Congress provides alternative financing arrangements for future investments.

VHA IS STRUGGLING TO DESIGN ASSET REALIGNMENT PROCESS

The goal of an asset realignment process, in our view, is to produce within a reasonable time frame a capital asset plan that is in the best interest of veterans namely one that provides better health care services for currently enrolled veterans while enabling more veterans to access VA care. The capital asset plan should conform to Office of Management and Budget guidelines.[6] If done successfully, the capital asset plan should provide a road map to guide investment decisions over the next decade.

Over the past 13 months, VHA has taken an inordinate amount of time trying to develop a method to achieve these objectives. In March 1999, VHA developed a broad conceptual framework to guide its design efforts. Over the next 3 months (July 1999), VHA developed a draft statement of work needed to conduct the market studies and an action plan for completing the studies. Three months later (October 1999), VHA developed a draft capital asset management policy statement that outlined a proposed design method as well as a revised statement of work and action plan. In February (4 months later), VHA provided a revised draft policy statement to a wide variety of stakeholders for their review.

These critical documents are currently being revised again. Over the next several months, VHA expects to (1) continue refining its capital asset realignment design method on the basis of stakeholder concerns and suggestions, (2) complete work needed to solicit and award a consulting contract, and (3) obtain senior management review and final approval of a method to employ.

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[4] VA Health Care: Challenges Facing VA in Developing an Asset Realignment Process(GAO/T–HEHS–99–173, July 22, 1999).

[5] VA's Capital Assets Realignment Plan for Enhancing Services to Veterans, hearing before the Subcommittee on Oversight and Investigations, House Committee on Veterans' Affairs, No. 106–20 (July 22, 1999).

[6] Capital Programming Guide, Office of Management and Budget (July 1997).

During the same period, VHA has also struggled to develop a capital asset realignment plan for its Chicago market. This initiative,[7] started in July 1998, produced a draft realignment plan in September 1999. VHA has spent the last 6 months obtaining and evaluating stakeholders' concerns and advice as well as reevaluating potential options. VHA expects this experience to help shape the ultimate design of its systemwide asset realignment process.

VHA'S PROPOSED CAPITAL ASSET REALIGNMENT PROCESS RAISES CONCERNS

We identified three weaknesses in VHA's proposed method. First, senior managers at headquarters appear to be in reactive, rather than proactive, leadership roles. Second, stakeholders appear to have decision-making, rather than advisory, roles. Third, key components, such as development of evaluation criteria, lack rigor; that is, they do not appear to be driven by quantifiable, objective data clearly linked to well-defined measurement standards.

VHA'S SENIOR MANAGERS LACK PROACTIVE ROLE

VHA's senior management should play a critical leadership role in the development of (1) well-defined evaluation criteria that have the measurement standards needed to guide the collection of data necessary to make capital asset realignment decisions, (2) guiding principles that consultants and others could use when developing asset realignment options for consideration, and (3) systematic procedures for scoring options in relation to each evaluation criterion.

However, VHA plans to give a consultant primary responsibility for developing options and evaluation criteria as well as for conducting the evaluation of potential options. Senior managers at headquarters are to be primarily in an oversight role, reacting to the consultant's proposed evaluation criteria, methods for evaluating potential options, and choice of the best option.

We are concerned about this arrangement. The capital asset plans that result from these market studies are expected to guide VHA's future investment initiatives for the next decade. Without strong leadership in the development of these plans, VHA risks not being able to timely implement meaningful capital asset realignments. A case in point is VHA's Chicago market realignment process. Senior managers at headquarters were not actively involved until after stakeholders and others raised significant concerns about the recommended realignment option. VHA has since convened a special review group that has spent the last 2 months assessing stakeholders' concerns and deciding how such concerns could be best resolved. Now, 20 months after the study was initiated, this review group has decided to set aside the originally recommended option and consider others, including options that had not been considered before. If senior managers had been involved, such options might have been considered earlier. With senior managers continuing in a reactive role in its proposed systemwide asset realignment process, VHA risks replicating in other markets its struggle to make progress realigning assets in Chicago.

VHA'S STAKEHOLDERS HAVE DECISION-MAKING ROLE

Last July we expressed concern that VHA's capital asset realignment process as then proposed could rely too heavily on local stakeholders who may have vested interests in maintaining the status quo. Our assessment of VHA's proposed asset realignment process today suggests that stakeholders remain heavily involved in a decision-making role.

VHA plans to have national and local committees, which possess decision-making authority, review the consultant's products, such as its proposed evaluation criteria and data collection methods. The committees' members include representatives of veterans' service organizations, union or labor organizations, medical school affiliates, research organizations, state veterans and health associations, and local VHA staff.

We remain concerned that stakeholders' participation as decision-makers on such committees could bias the market studies and, ultimately, the capital asset plans. VHA stakeholders are a diverse group with competing interests, who, quite naturally, could oppose some changes that they believe are not in their best interests. For example, medical schools' reluctance to change long-standing business practices has sometimes been a factor inhibiting VHA's asset management. In addition, unions sometimes are reluctant to support decisions that result in a restructuring of services because operating efficiencies can result in staffing reductions.

[7] VA Health Care: Closing a Chicago Hospital Would Save Millions and Enhance Access to Services (GAO/HEHS–98–68, Apr. 16, 1998) recommended that VHA develop and implement a plan that meets veterans' needs by operating fewer capital assets.

We believe it is essential to involve stakeholders in an advisory role in the capital asset realignment process. This is because they can provide valuable perspectives on the evaluation criteria for selecting the best market study option and on procedures for scoring realignment options in relation to the criteria. Such input could enhance stakeholder understanding of VHA's capital asset realignment process and build confidence that realignment decisions are fair and fact-based.

Realignment Decision Points Lack Rigor

From our perspective, VHA's experience with the Chicago capital asset realignment study offers three valuable lessons so far that could improve VHA's systemwide asset realignment process:

—ill-defined capital asset realignment evaluation criteria lead to unsupportable decisions;

—flawed asset realignment options result in flawed decisions; and

—an unstructured, subjective evaluation process impedes stakeholder acceptance.

It does not appear, though, that VHA has taken these lessons into account for its proposed realignment process. First, VHA's systemwide evaluation criteria, when developed, could be vaguely defined. VHA's draft statement of work for its systemwide process calls for a consultant to develop evaluation criteria, but it does not require the evaluation criteria to be defined in terms of quantifiable measurement standards that are clearly linked to each criterion. The lack of well-defined criteria can lead to problems, as it did in the Chicago realignment process. There, VHA used accessibility of health care services as a criterion without adequate measurement standards that could be quantified, such as the potential effect on veterans' travel time and the number of veterans affected. Moreover, because VHA's draft statement of work for its systemwide process does not require the consultant to develop a systematic data collection approach that directly links data to individual evaluation criteria, the consultant's data collection could be incomplete. This could significantly reduce the likelihood that VHA would select the best option available.

Second, we are concerned that VHA's systemwide realignment process may not consider the best options that are potentially available. For example, VHA's Chicago process appears to have explored flawed options because VHA's steering committee and consultant limited the options evaluated to ones that would generally rearrange services among existing assets. On the basis of its assessment of stakeholders' comments pertaining to the Chicago process, we understand that VHA is reevaluating options, including ones not originally evaluated. VHA's draft statement of work for its systemwide process calls for a consultant to develop at least three alternative asset configurations. VHA plans to rely on the consultant's judgment to develop the best options for consideration. Unless options other than incremental reconfiguration of current assets are considered, the realignment process is likely to take a narrower view than is needed to identify the most efficient and effective way to meet veterans' health care needs. For example, building or leasing a replacement facility in a location closer to where veterans live might not be evaluated.

Third, we are concerned that VHA will use an unstructured process to decide which of the available capital asset realignment options best meets the evaluation criteria. For example, in its Chicago process, VHA did not prioritize its evaluation criteria, nor did it use a systematic scoring method to reach decisions about how well each option met the evaluation criteria. Rather, its recommended realignment option was determined on the basis of the subjective consensus of a steering committee, but the draft report did not elaborate sufficiently on VHA's rationale. VHA's draft statement of work for its systemwide process calls for a consultant to develop a method for evaluating realignment options. At present, this statement of work has no requirements for the consultant to develop a systematic way to score how well each option meets the evaluation criteria, nor has anyone in VA been charged with doing this. Without a systematic method for reaching a decision about the best option, VHA's realignment decisions may be difficult to explain, support, and defend.

While VHA possibly could satisfactorily address our concerns within the coming months, its progress to date casts doubt on its ability to do so. This is because, in part, VHA may not possess the requisite financial planning skills to make the best realignment decisions. Currently, VHA is using health care professionals to make financial decisions. While such professionals have the necessary skills to make decisions about veterans' health care needs, they may not have the business skills necessary to make the best financial decisions. For example, financial experts possess knowledge and skills for analyzing life cycle costs of assets under different scenarios as well as for determining potential pay-back schedules for initial capital investments for options and potential long-term returns on those investments.

Clearly, it seems desirable to bring to bear the combined expertise of financial experts and health care professionals to evaluate potential realignment options to

identify those that provide the best investment return for veterans and other taxpayers. There is a unit within VA that, in our view, has worked to develop financial expertise regarding capital asset management decision-making, namely, VA's Capital Investment Board. The Board has (1) experience developing options evaluation criteria that are more clearly defined than criteria used in VHA's Chicago realignment process, (2) a systematic data collection approach that directly links data to each evaluation criteria, (3) guidance for developing options, and (4) a systematic options evaluation process. The Board currently uses a capital budgeting model for major investments that embodies the key attributes needed to address our concerns about VHA's process. Its model has been used and refined over the past 3 years, and it gives decisionmakers, in our view, better information than they had in the past.

New Business Model Could be Considered

There appear to be two alternative business models for completing the design and implementation of a capital asset realignment process in a timely manner, besides continuing with VHA's current efforts. First, leadership of the asset management responsibilities could be transferred to another unit within VA, but outside of VHA. A second model could involve the shifting of capital asset decision responsibility outside VA.

Transferring capital asset management responsibilities to another unit within VA, such as the Capital Investment Board, could better combine VHA's health care expertise with VA's financial experts. As previously discussed, VA's Capital Investment Board appears to have a business model that could address financial management decisions involving capital asset realignment options. This approach has appeal because the Board has a full-time dedicated group that has studied industry best practices for capital asset management and has used this knowledge to develop evaluation criteria and procedures to score capital asset investment options.

Capital asset decision-making could also be moved outside of VA. This could be accomplished through the establishment of an independent commission or comparable group to develop and evaluate options for realigning capital assets. This option could be advisable if it is determined that VA lacks the desire or wherewithal to realign capital assets or that the pressures from competing stakeholders inherent in VA's environment are deemed to be insurmountable.

Regardless, VA needs to finalize its capital asset realignment process as quickly as possible because its delay is creating dilemmas for short-term and long-term capital investment decisions, as I will discuss next.

VHA'S DELAYS CREATE CAPITAL BUDGETING DILEMMAS

VHA's slow progress creates dilemmas for VA's capital budgeting process. On a short-term basis, VHA, VA's Capital Investment Board, and the Office of Management and Budget must decide what level of risk they are willing to tolerate as they continue maintaining or improving capital assets without sufficient information about VA's future asset needs to ensure cost-effective investment decisions.

Appropriately, they seem unwilling to accept much risk when making high-cost capital investment decisions those exceeding $4 million. They have significantly limited such investments over 4 fiscal years (1998 through 2001) and could continue this de facto moratorium for another 3 years (through 2004), given VHA's struggle to realign its assets. VA's fiscal year 2001 budget 8 for high-cost capital investments, for example, requested only $25 million for one new project after VA's Capital Investment Board considered 14 VHA high-cost investment proposals totaling $350 million.

By contrast, there appears to be a greater willingness to accept more risk for less expensive capital investment decisions those below $4 million. We find this troublesome because there have continued to be significant investments requested for less expensive capital improvements about $400 million for each of fiscal years 2000 and 2001. These involve improvements at many locations, such as ward renovations; outpatient space reconfigurations; and enhanced heating, ventilation, and air conditioning systems. To successfully manage investment risks, VHA needs to carefully consider its less expensive construction investments at delivery locations that could ultimately be determined to be unneeded to meet veterans' health care needs once capital asset plans are completed.

In March 1999 we reported that, until an effective capital asset planning process is in place, VHA's less expensive investment decisions should be subjected to tighter scrutiny. Toward that end, we suggested that VHA ensure that the fundamental principles underlying the Capital Investment Board's evaluation process for high-

cost capital investment be rigorously implemented when making less expensive capital investment decisions.[9]

An effective risk assessment process should identify health care delivery locations where, for example, there are no alternatives for providing care. This process could involve two key components: (1) risk measurement factors and (2) data to evaluate investment proposals in relation to risk factors. Low-risk factors, for example, could include noncompetitive markets, large veteran population growth, or large growth in veterans' use of VHA services.

On a longer-term basis, VA faces a different dilemma. Today VHA's high-cost capital investment needs are not known and will remain so until its capital asset plans are completed; nonetheless, VHA believes, and we agree, that they will likely require a significant investment. VHA's investment needs may not be as daunting as they now seem because, for example, investments will be spread over the next decade and each will require many years to implement. VHA's Chicago realignment process, for example, is expected to take 10 years to be fully implemented.

Moreover, the magnitude of the new investment resources needed could be mitigated. First, VHA should realize significant returns on these capital investments up to 100 percent or more in the form of annual operational savings. VHA's Chicago realignment option, for example, was estimated to yield annual operating cost savings of $189 million, compared with one-time capital investment needs of $92 million. In March 1999 we suggested that some or all of these savings could be used to finance future capital investment decisions. Legislative action, for example, could authorize VA to accumulate resources (that is, savings) in a Capital Asset Fund by charging VHA delivery locations for the capital investment costs used to realign assets. Locations could return to the fund some or all of the amount invested over a prescribed number of years.[10]

Second, last year VA proposed a new funding source to help finance high-priority investments faster. In its fiscal year 2000 budget submission, VA proposed a 5-year demonstration that would allow VHA to sell, transfer, or exchange up to 30 excess or underutilized properties; deposit proceeds into a new Capital Asset Fund; and use the Fund to invest in more appropriate assets. This proposal, which we supported last year, offers a way to help finance capital investments needed to realign assets for two reasons: VA has significant unused or underused buildings, and it lacks incentives to dispose of properties because funds can, by law, be spent only to construct, alter, or acquire nursing home facilities.[11]

In addition to addressing high-priority asset needs faster, such funding sources could also provide incentives for more effective capital planning and greater accountability for investment decisions. To realize such benefits, the Congress would need to expand the types of deposits that VHA could make into its proposed Capital Asset Fund or establish a separate revolving fund for this purpose.

CONCLUDING OBSERVATIONS

We are concerned that VHA's slow progress in establishing an asset realignment process needlessly delays critical decisions and the opportunity to reinvest resources to enhance veterans' future health care. Furthermore, the weaknesses we identified in VHA's realignment process, as currently proposed, undermine our confidence that, once implemented, it will produce within a reasonable time frame capital asset plans that are in the best interest of veterans and taxpayers. It appears that if a capital asset realignment process is patterned after the Capital Investment Board's decision-making model, the process would be less likely to replicate VHA's Chicago experience.

Because VHA is struggling to reach a sound realignment decision in Chicago and complete the design of a systemwide realignment process, and because VA's Capital Investment Board has a model that could address many of VHA's weaknesses, it seems appropriate that VA consider transferring the asset planning responsibility to the Board. The daily cost of delayed decisions is unacceptably high.

Mr. Chairman, this concludes my prepared statement. I will be happy to answer any questions that you or Members of the Subcommittee may have.

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[9] VA Health Care: Capital Asset Planning and Budgeting Need Improvement(GAO/T–HEHS–99–83, Mar. 10, 1999).

[10] GAO/T–HEHS–99–83, Mar. 10, 1999, p. 23.

[11] GAO/T–HEHS–99–83, Mar. 10, 1999, p. 23.

GAO CONTACT AND STAFF ACKNOWLEDGMENTS

For future contacts regarding this testimony, please call Stephen P. Backhus at (202) 512–7101. Individuals who made key contributions to this testimony include Paul Reynolds and Walter Gembacz.

Senator BOND. Before moving on to other accounts, I have to tell you I'm very troubled about the accountability in the VA's medical care budget. We've given the Department tremendous flexibility in how it allocates its budget, yet we have come to find huge discrepancies between what we thought we were spending money on and what is actually happening. We are seeing this is in Hepatitis C, post traumatic stress disorder, substance abuse and other areas which are stated as national priorities for the VA. This is something we absolutely must get a handle on, or we will begin in the appropriations process to be far more prescriptive as to how VA is to allocate its budget.

VETERANS BENEFITS ADMINISTRATION

Moving on to the Veterans Benefits Administration, the budget also calls for an increase of roughly $100 million for VBA. There are tremendous needs in VBA to expedite and improve the quality of veterans' claims for service-connected disability and pension payments, and it seems additional funds are needed for more staff and to bring the process into the 21st Century.

I am deeply disappointed that so little progress seems to have been made in the last year. I recognize that the under secretary, Joe Thompson, has made many changes including a reorganization of the field, and a new emphasis on quality, not just timeliness. When you overhaul a system, obviously it's going to be disruptive. However, we've been talking about this problem as long as I've been chairman, and as long as Senator Mikulski was chair before me.

In fiscal year 1999, the time it took to process an original disability claim worsened from the year before, growing from 168 days in 1998—which we said was unacceptable—to 205 days in 1999. Now let me let you guess on how excited and enthusiastic we are about those numbers. And, quality improved only marginally. I certainly hope you are on a glidepath at this point to your goal of 74 days, and that we won't see any more upticks. Too many veterans are dying before their claims are decided, and that is simply unacceptable.

OTHER CONCERNS ON VA'S BUDGET

With respect to other aspects of the administration's budget request, I'm disappointed with the budget proposal for research. This critical program will be frozen at current levels of $321 million, leading to a real reduction in staffing and a further decline in the number of proposals that get funded. Certainly based on my experience and visits with the VA hospitals, I will tell you that we are able to attract and retain top quality physicians and researchers mainly because they have the opportunity to combine research with their service to patients; and I would hope that you would agree that this program is vitally important in maintaining VA's cadre of high quality clinicians.

I am also discouraged that VA has chosen, once again, to cut the budget for the State home construction grant program. The program is slated to be cut by one-third, down to $60 million, despite the fact there are hundreds of millions of projects in the pipeline. The program is a very cost-effective way of caring for our aging veteran population, and we will be seeking to ensure an appropriate level of funding.

STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator BOND. That concludes my statement, and I'll be happy now to turn to Senator Mikulski. Welcome.

Senator MIKULSKI. Thank you very much, Mr. Chairman. This morning I would like to welcome the Secretary of VA, Mr. Togo West, to our hearing to discuss our most crucial and probably one of the significant parts of our VA–HUD appropriations.

Since the VA was founded, we fought a world war, a cold war, a Gulf war, and now once again our troops are overseas in Bosnia, Kosovo and other places around the world, keeping the peace and enforcing the peace. We're very proud of our military, and one of the reasons, as they serve we make a promise to them that when they come home, there will be a Department of Veterans Affairs to meet their needs. Promises made must be promises kept. Veterans, both men and women, really count on the VA for so much of their medical care.

The VA budget contains some good news for our veterans despite some troubling issues that must be resolved.

VA health care is funded at $20.9 billion, including $608 million in medical collections, the largest increase VA has received in years. While many groups believe more is necessary, it is an important first step to ensuring that our veterans get the health care that they need. We're also very glad that the proposal in the President's budget for VA medical and prosthetic research is funded at $321 million; and we all know the crucial nature of VA medical research. VA medical research doesn't just help veterans, it helps everyone.

Hepatitis C research is funded at $340 million, an increase of $145 million over fiscal year 2000. This is especially important for Vietnam-era vets; a major cause of liver cancer, Hepatitis could become a major medical expense in future years. I also believe that the Hepatitis C research will have tremendous benefits to our civilian community. When we talk to our firefighters or our first responders to medical emergencies like our paramedics, one of the greatest fears that they have is contacting Hepatitis C, though they used universal precaution; but they still feel very vulnerable; nurses, et cetera.

So once again, as VA does the research to help veterans it also helps a larger population, and we're very proud of it.

I'm very proud of the three major facilities in Baltimore or in Maryland; Baltimore, Fort Howard, and Perry Point, in addition to our wonderful extended rehab and long-term care facilities. You should know that we're very pleased with the community-based outpatient clinics that we have established. I think it has been a new model for making highest and best use of staff, taking the services to where the veterans are, and yet making again highest

and best use of the specialty services we have; we are very, very pleased about that.

There are two issues that I will raise with you in the course of the hearing, Mr. Secretary. One is the future of Fort Howard, which served our veterans so ably over many years; but now the facility is dated, we're talking about a new mission, but there is a question about both mission and who will be the leader.

The second will be the yet still-unresolved cases of discrimination that I brought to your attention; and there are people in the audience here who have come to hear our questions, and we will be able to deal with this. I know of your deep commitment to end discrimination across all lines; race, ethnicity, gender, and so on. There are still some troubling things that I would like to share with you; they're not widespread, they're not systemic, and I'd like to bring it to your attention for a greater resolution.

So I look forward to hearing your testimony, and once again, problem-solving with you both on budget and service delivery and an open door both for veterans for service and for people to be able to move up the ladder of opportunity within the veterans organization itself.

Thank you very much.

Senator BOND. Thank you very much, Senator Mikulski, and now I turn to Senator Burns for his statement.

STATEMENT OF SENATOR CONRAD BURNS

Senator BURNS. Thank you, Mr. Chairman. I will just submit my statement, and I want to thank——

Senator BOND. We will really be pleased to submit the whole thing in the record.

Senator BURNS. Really?

Senator BOND. Yes, sir.

Senator BURNS. You're not going to edit it?

Senator BOND. No, sir, you can have the whole——

Senator BURNS. I appreciate the Secretary coming in, and we talked about some things that are pretty parochial as far as the State of Montana is concerned.

I have a couple of questions, and I'm looking forward to hearing from the witnesses. Here it is, we've already gone 20 minutes and we haven't learned a dang thing.

Senator BOND. Well, thank you very much, Senator Burns, I'm sure glad you weren't paying attention, because you would have heard some really interesting things.

Senator BURNS. Apparently, I was——

Senator BOND. Tell you what, I'll submit a copy of my statement for your review, too.

With that, Mr. Secretary, would you proceed?

STATEMENT OF TOGO D. WEST, JR.

Secretary WEST. Thank you, Mr. Chairman, Senator Mikulski, Senator Burns, Members of the Subcommittee. Indeed, we have had a chance to learn quite a bit over the last few minutes, and we're grateful to you, Mr. Chairman, and to the Members of the Subcommittee for this opportunity to present the administration's

fiscal year 2001 budget proposal for the Department of Veterans Affairs.

I do have a statement.

Senator BOND. We will be happy to have the full statement submitted in the record, right after Senator Burns' statement. And we just ask you to summarize the things that you think are most important, and we will get into probably many of these areas in the questions.

Secretary WEST. Thank you, Mr. Chairman. I have a few brief highlights.

The President's budget for 2001 for the entire Federal Government uses a fiscally responsible approach to balancing the budget; it puts our nation on a path to eliminate the national debt in the year 2013, while strengthening social security and extending its solvency to the year 2050. The President's fiscal year 2001 budget request for the Department of Veterans Affairs recognizes as well another debt—that owed by this nation to her veterans.

The request reflects, as has been noted, the largest discretionary dollar increase ever proposed by any president for veterans programs. It demonstrates his and this nation's continued commitment to those who have served our country well and with honor.

It proposes significant increases in each of VA's three administrations and for all of our staff functions. We expect these resources will continue to improve our ability to provide the highest quality service.

The 2001 budget request totals, as has been noted, some $48 billion—$22 billion for discretionary programs, $26 billion for entitlements—that request is $1.5 billion above last year's enacted funding level. Let me note at this point that we in the Department are grateful to this committee especially, Mr. Chairman, for the work you did in seeing that the budget that emerged from the Congress and from the joint efforts of the administration and Congress for fiscal year 2000 was able to support the things that needed to be done for veterans.

A $1.5 billion increase in the fiscal year 2001 discretionary budget, along with those resources that the Congress added and that the administration agreed in fiscal year 2000 provides a 2 year total increase of more than $3.1 billion, or 16.4 percent.

For the Veterans Health Administration, our appropriation proposal is $20.3 billion to provide health care; this is a $1,355 million increase over last year's appropriated level, and added to that is an additional $608 million in anticipated collections, for a total of $20.9 billion to be spent on health care.

With these funds, VA will treat in fiscal year 2001, 3.9 million veterans, 100,000 more patients in 2001 than in 2000. VA will open 63 new outpatient clinics to go with the total that we are opening in fiscal year 2000 so that by the end of fiscal year 2001 we should exceed some 650 outpatient clinics across the nation. We will put 1,500 full time equivalent employees directly into the effort to increase access to VA health care, and to improve health care service to veterans.

And as noted, we will increase our spending on Hepatitis C by $145 million for a total of $340 million, and we will fully fund the provisions of the Veterans Millennium Health Care and Benefits

Act passed last year by the Congress, in the amount of $548 million. This allows us to increase our funding on long-term care initiatives by $350 million, enhancing home and community-based care programs for older veterans, covering the implementation of emergency care programs for veterans as well.

As noted, the $321 million which we will set aside again for VA research, will support more than 1,942 high priority research programs.

It is true, Mr. Chairman, that over the last several months in medical journals and in other media, were noted the reports that as many as 180,000 deaths may be occurring in the United States each year due to errors in medical care, many of which are preventable. As you have pointed out, it will take dramatic action from every health care provider in the nation in addition to the VA to improve in this area.

We plan to spend $137 million to monitor and oversee safety issues and recruit and comprehensively train all VA health care staff on a recurring basis. We not only recognized the problem, but also recognized that it is a great opportunity, perhaps the greatest in recent times, for this nation to make very dramatic improvements in the way health care is provided.

We have insisted that it is impossible to correct medical errors and to prevent them without first acknowledging that they do exist. We've launched a National Safety Partnership, an organization that's brought together Federal and private sector experts to join forces to address this problem. We have recognized that change will require team effort, and we will make that effort.

We have led the nation in identifying problems that result in medical errors, and this budget will enable us to continue that leadership. In the coming year, our oversight of patient safety will be addressed through comprehensive monitoring at the national and local levels. Significant training, highlighted by a national center for patient safety, a quality scholars program, and 20 hours of biannual training for all full time staff, thus keeping this Department at the forefront of patient safety management issues.

For benefits programs, we're requesting $22.8 billion to support compensation payments for 2.3 million veterans, 301,000 survivors of veterans, and 864 children of Vietnam veterans who were born with spina bifida. These funds will support pension payments to 363,000 veterans and 253,000 survivors.

We propose a cost of living adjustment, currently estimated at 2.5 percent to all compensation beneficiaries. We propose the increase be effective December 1, 2000.

If this committee and the Congress approves, we will pay full disability compensation to veterans of Filipino forces who served with U.S. forces in World War II and are now residing in the United States. They currently receive benefits at half the level of the U.S. veterans beside whom they fought.

We're requesting $1.6 billion for the readjustments benefit program to provide education benefits, opportunities for veterans and eligible dependents, and for special assistance programs for disabled veterans.

For the Veterans Benefits Administration and benefits processing, the budget provides $999 million. That's an increase of $109

million over fiscal year 2000. With that, we will add 586 FTE into compensation processing to help us improve quality and the timeliness of disability claims. It will result in a 14 percent increase in staffing for adjudication over the past 2 fiscal years when we add in the 440 that were included in the fiscal year 2000 budget.

We will also continue our funding for the pilot project, Virtual VBA, to get us to the era where veterans claims can be processed in an entirely electronic environment. Thus eventually eliminating our paper-intensive and time-consuming manual claims process.

Let me emphasize, Mr. Chairman and Members of the Subcommittee, that is very important to us, for that is the long-range solution we believe to both timeliness and accuracy in claims processing. But in the interim to have results now, we have added in the 586 additional FTE to try to make improvements in the processing right now.

Last year 561,000 veterans died, more than 1,500 a day. About 1,000 of those each day are World War II veterans. For the operation of the National Cemetery Administration we are proposing $110 million for their budget, a $13 million increase over the 2000 appropriated level.

That budget provides funding and FTE to address an increasing interment and maintenance workload at our national cemeteries, due to the high rates of increasing interments during the first years of operation of new national cemeteries. In addition, we have four new national cemeteries that are operational, two that opened in 1999 at Saratoga, New York, and at the Abraham Lincoln National Cemetery outside Chicago. And two more that will open this year: the Dallas-Fort Worth National Cemetery, and the Cleveland, Ohio National Cemetery. Also, this budget includes master planning funds on sites which will be used on new national cemeteries in Atlanta, Detroit, Miami, and Sacramento.

Mr. Chairman and Members of the Subcommittee, our national cemeteries are and should be shrines dedicated to preserving our nation's history, nurturing love of country and honoring the service and sacrifice of our veterans. They should be places where our honored dead rest, in quiet triumph, yes; but also where veterans families can, amid peaceful and beautiful surroundings, resume their closeness, even for a brief moment, with family members who are buried there. And where visitors can move in hushed awareness. The grave markers among which they walk are in truth memorials both to our veterans and to our nation's eternal virtues of patriotism, honor and fidelity.

To achieve this, we will use $5 million of the $13 million increase to begin this national shrine commitment, beginning an extensive and long-deferred renovation of grounds, grave sites, grave markers and historic structures. This amount, $5 million in a $48 billion budget, is only a small down payment on years of work which will commence across the entire cemetery system.

For 224 years, America's veterans and our men and women in uniform have brought a record of security and peace to our North American continent, benefiting this nation and our citizens. With this bill we say to our veterans, "Well done. The nation values your gift of service and patriotism and will honor her commitment to you."

We're grateful to this committee and to this committee's staff, to each member, for your support of our veterans and of this department. We're grateful to the VSOs, the veterans service organizations, for their advocacy both in our budgeting cycle and in the appropriations cycle. We look forward to working with you on these issues in the future.

PREPARED STATEMENT

Seated with me, Mr. Chairman, to my immediate right, the Acting Deputy Under Secretary and the Under Secretary Designate for Memorial Affairs, Mike Walker. To my immediate right, the Under Secretary for Health, Dr. Tom Garthwaite. To my left, Mark Catlett, who directs our budget, Deputy Assistant Secretary of the Budget. To the far left, Joe Thompson, Under Secretary for Benefits.

We are available for your questions.

[The statement follows:]

PREPARED STATEMENT OF TOGO D. WEST, JR.

Mr. Chairman and members of the Committee, good morning. I am pleased to present the President's 2001 budget request for the Department of Veterans Affairs (VA). The President's budget for 2001 uses a fiscally responsible approach to balancing the budget. Utilizing realistic and responsible funding levels, it puts our Nation on a path to eliminate the national debt in the year 2013, making our Nation debt free for the first time since 1835.

The President's request for VA reflects the largest discretionary dollar increase ever proposed for veterans' programs. It demonstrates his continued commitment to those who served our country with honor. Our budget proposes significant increases for each of VA's three administrations and all of our staff functions. These resources will allow us to continue to improve our ability to provide the highest quality service to our Nation's veterans—service they have earned through their sacrifices for America.

We are requesting approximately $48 billion, which includes $22 billion for discretionary programs, without collections, and $26 billion for entitlements. Our request for discretionary programs is $1.5 billion more than last year's enacted funding level. This request, along with additional resources agreed to by Congress and the Administration in 2000, reflects a two-year total increase of more than $3.1 billion, or 16.4 percent.

Our veterans are entitled to the best health care America can provide. In the past few years, we have transformed the hospitals run by VA to provide greater access for better care to more veterans. And with the funding in our fiscal year 2001 budget, we will continue this improvement.

The budget provides $20.9 billion, including $608 million in medical collection transfers, to provide medical care to eligible veterans. This represents a $1.4 billion increase over last year's level. VA plans to open 63 new outpatient clinics and treat 100,000 more patients in 2001 than in 2000, a 2.6 percent increase. This patient level is 24 percent above the 1997 baseline, which exceeds our goal of a 20 percent increase.

We are focusing our resources on improving veterans' access to VA health care and the services we provide them through newly established service standards and access goals. These are:

—New patients are to receive an initial or non-urgent appointment with their primary care or other appropriate provider within 30 days.

—Patients will receive a non-urgent specialty appointment within 30 days when referred by a VA practitioner.

—Patients will be seen within 20 minutes of their scheduled appointment.

Restructuring efforts made possible through the use of buyout authority will allow us to redirect an additional 1,500 full time equivalent (FTE) employees to meeting these goals. Altogether, more than 2,200 employees will be dedicated to improving access and services. These FTE, along with planned management savings and an additional funding request of $77 million, will provide a total resource commitment of $400 million in this area in 2001.

To enhance VA's leadership role in patient safety management, we plan to spend $137 million to monitor and oversee safety issues and to comprehensively train all VA staff on a recurring basis.

We are also requesting an increase of $145 million to treat veterans with Hepatitis C. In addition, our budget would fully fund the $548 million needed to implement provisions in the Millennium Act dealing with specialized mental health services, emergency care, and extended care services.

Enhancing VA's patient safety management and reporting system will also improve the quality of care we provide veterans. It has been reported in medical literature that as many as 180,000 deaths occur in the United States each year due to errors in medical care, many of which are preventable. It will take dramatic action from every health care provider, not only VA, to improve in this area.

VA has not only recognized the problem, but also recognized that it is the greatest opportunity we have had in a very long time to make dramatic improvements in the way health care is provided in our country.

We have acknowledged that it is impossible to correct or prevent errors without first accepting that they exist.

We are taking a systematic approach to solving the problem of patient safety, and to the way we deliver health care, to identify problems and develop solutions.

We have launched the National Patient Safety Partnership, an organization that has brought together Federal and private sector experts to join forces to address this problem.

We have recognized that change will require a team effort at every level of our organization, and we are committed to making that effort.

VA has led the Nation in identifying problems that result in medical errors. Our budget will enable VA to continue its world leadership in patient safety initiatives—benefiting not only veterans, but all Americans.

Our oversight of patient safety will be addressed through comprehensive monitoring at the national and local levels. We will be redirecting an additional 190 FTE toward patient safety enhancements, which means 500 FTE will be dedicated to this effort. Significant training, highlighted by a national center for patient safety, a quality scholars program, and 20 hours of biannual training for all full-time staff, will keep VA at the forefront of this important area.

In addition to basic clinical components funded through medical care, the 2001 budget request provides considerable support for the education and training of health professionals, and for VA's research programs.

In addition, we will increase the number of unique patients treated to 3.9 million, continue to enhance the quality of our care, and improve customer satisfaction.

Among our most important new initiatives are those designed to provide long-term care for veterans. These initiatives are linked to the provisions of the Millennium Act. The $350 million increase for these initiatives included in this budget will enhance home and community-based care programs for older veterans. It will also cover out-of-system emergency care for certain veterans.

VA is committed to formulating and implementing a well-designed pilot of VA-Medicare subvention. Currently, the Department of Defense is operating a three-year subvention demonstration in six sites, scheduled to end in December 2000, and the demonstration results may offer a useful lesson for us. We look forward to working with you again to pass a VA subvention model that does not jeopardize the Medicare Trust Funds or VA's ability to provide top-quality medical care to high priority veterans.

We propose a legislative initiative to combine the Health Care Services Improvement Fund and the Extended Care Revolving Fund with the Medical Care Collections Fund (MCCF) to improve administrative efficiencies. This legislative proposal also allows 50 percent of medical collections to be returned to the Treasury as they are received until a level of $350 million is achieved. Returning collections in this amount will recoup Millennium Act funding appropriated in medical care, while maintaining an incentive to collect all government debt.

To continue VA's identification and treatment of Hepatitis C for veterans, we request an additional $145 million, which will increase the total funding level to combat this disease to $340 million. Also provided is funding to meet anticipated increases for pharmaceutical and prosthetic costs.

We continue to support a two-year spending availability of $900 million, less than five percent of our resources—excluding those funds set aside due to the deferred spending of medical equipment funds required by law. This proposal will provide VA with maximum flexibility regarding spending decisions and will promote cost-effective decision-making.

For Medical and Prosthetic Research, a total of $321 million and 2,883 FTE will support more than 1,942 high priority research projects to enhance the quality of

health care our veterans are provided. This level of funding will allow VA to continue our significant research in the areas of Gulf War veterans' illnesses, diabetes, Parkinson's disease, spinal cord injury, cancer, prostate disease, depression, environmental hazards, and women's issues, as well as rehabilitation and Health Service Research and Development field programs.

No other federally-supported clinical or research entity has initiated or completed such critical and ambitious research activities on behalf of America's veterans as VA. The Department expects the amount of non-appropriated research funding we receive from the private and public sectors to total an additional $497 million.

The Balanced Budget Act of 1997 and the Millennium Act allow VA to retain collections from third parties, copayments, per diems, and certain other sources. These collections are deposited in the MCCF and are available for transfer to the Medical Care appropriation. The funds remain available to VA until they are expended. For 2001, VA estimates more than $958 million will be collected, of which VA will retain $608 million.

In part, we will be able to do this by implementing reasonable charges to certain veterans for inpatient and outpatient procedures. In addition, we are in the process of ensuring that our collection documentation meets the requirements of the Health Care Financing Agency. We are also looking to improve our ability to collect funds from private sector organizations. Additional Tricare payments from the Department of Defense, and increased copayments by veterans as provided for in the Millennium Act are assumed in the collection estimate.

For the Medical Administration and Miscellaneous Operating Expenses, or MAMOE activity, we are requesting $64.8 million in appropriations and expect $7.2 million in reimbursements to support 584 FTE in 2001. This level of staffing will strengthen the functions, especially in the areas of quality assurance and performance management, needed to oversee VA's efforts.

Our veterans are entitled to have their claims for benefits processed correctly and in a timely manner. This budget will fund initiatives to process claims and education benefits in an electronic environment—allowing those who process claims to have complete and easy access to the information they need.

For benefits administration, the budget provides $999 million. The request reflects an increase of $109 million over the operating level enacted in 2000 and a one-time adjustment of $30 million from the Readjustment Benefit Account to ensure that all Vocational Rehabilitation and Employment administrative costs are funded from General Operating Expenses. Excluding this technical adjustment, this is a 13 percent increase.

These additional resources will ensure that veterans' compensation, pension, vocational rehabilitation and employment, education, and housing benefits will continue to be delivered while we move forward with our reengineering efforts. To help us process disability claims more efficiently, provide quality-enhancing initiatives, and continue our succession planning efforts, 586 FTE will be added to compensation processing.

VA's benefits programs are a tangible expression of the Nation's obligations to its veterans. For 2001, the Administration is requesting $22.8 billion to support compensation payments to 2.3 million veterans, 301,000 survivors and 864 children of Vietnam veterans who were born with spina bifida, and to support pension payments to 363,000 veterans and 253,000 survivors.

We propose to provide a cost-of-living adjustment (COLA) based on the change in the Consumer Price Index, to all compensation beneficiaries, including spouses and children receiving dependency and indemnity compensation. The percentage of the COLA is currently estimated at 2.5 percent, which is the same percentage that will be provided, under current law, to veterans' pension and Social Security recipients. The increase would be effective December 1, 2000, and would cost an estimated $345 million during 2001.

If Congress approves, VA will pay full disability compensation to veterans of Filipino forces residing in the United States who currently receive benefits at half the level that U.S. veterans receive. The cost of this legislation is estimated to be $25 million over five years.

The Administration is also proposing repeal of a provision in the Balanced Budget Act of 1997 which would preclude the Government from making its October, 2000, VA-benefit payments on Friday, September 29, 2000 and instead require that they be delayed until Monday, October 2 (in fiscal year 2001). Under the law which would otherwise apply, when the first of the month falls on a weekend, payments are to be made on the Friday immediately preceding it.

In order to enhance educational opportunities for veterans and eligible dependents and provide various special assistance programs for disabled veterans, an appropriation of $1.6 billion is being requested for the Readjustment Benefits program.

Education benefits will be provided for about 480,000 trainees in 2001, including 309,000 training under the Montgomery GI Bill. This request includes funds for the annual Consumer Price Index adjustment, which is estimated to be 2.7 percent effective October 1, 2000, for education programs.

The heart of the Veterans Benefits Administration's (VBA) strategy for improved customer service is measurable success. This budget builds on critical indicators that have been instrumental in past performance. VBA is positioning itself to improve dramatically the delivery of benefits and services.

Mr. Chairman, as we all know, VA is not completing work on claims for compensation and pension benefits in as timely a manner as we would like. This is a difficult problem not easily or quickly resolved. More veterans are receiving disability compensation today than at any time in the history of the United States and, despite a declining veteran population, VA has an ever-increasing compensation workload.

Veterans are filing claims today for more issues or conditions than at any time in our history. The complexity of these claims has also increased dramatically. The level of effort required to evaluate a claim for benefits today is significantly greater than just eight years ago. This is because of both the increased complexity of today's claims and expanded procedural requirements occasioned by judicial review of our decisions. VA has embarked on an aggressive program to hire veterans service representatives who, when fully trained in these intricate procedures, will ensure veterans get the right decision on their claim the first time.

By the end of 2001, we expect to have 1,000 more employees to work on adjudicating claims than we had last year. Significant strides have been made in implementing our case management approach to customer service and in improving the information technology infrastructure that supports veterans' claims processing. For example, two years ago, a veteran would get a busy signal more than half the time he or she called our nationwide toll-free number; today, the percent of blocked calls is 5 percent.

The problems facing VA in overcoming its claims processing backlog were long in making and are systemic in nature. All of us are dissatisfied with the rate of our progress, but there is no "quick fix" to this problem. To do what is needed will take time, but we have put in place a foundation for success and are requesting a budget through which these goals will be achievable.

Our vision for VBA emphasizes accurate and timely claims decisions, along with a high level of customer service and satisfaction. To reach those goals, VBA's 2001 budget request is $999 million and 11,824 FTE. This represents an increase of $109 million and 287 FTE above the 2000 level, plus a one-time adjustment of $30 million from the Readjustment Benefit Account for Vocational Rehabilitation and Employment administrative costs.

By combining this increase in the number of employees with positions available due to efficiencies in other areas, VBA will be able to increase its number of personnel in claims processing and associated initiatives by 586. This will result in a 20 percent increase in adjudication staffing since 1999.

This budget continues to include funding for a pilot project, Virtual VBA, which will allow VA to process veterans' claims in an electronic environment, eventually eliminating the now paper-intensive and time-consuming manual claims process. When fully implemented, it will provide for complete access to information by anyone with access to the new system.

In addition to the electronic claims processing pilot project and increased FTE, VBA seeks funding in the amount of $31.1 million for a number of other C&P initiatives including:

—The expansion of our Systematic Technical Accuracy Review (STAR) Program in order to obtain current and diagnostic information about the accuracy of the work being produced at field stations.

—The Systematic Individual Performance Assessment (SIPA), a new initiative designed to complement the on-going STAR program, which will bring performance assessment and accountability to the journey-level employee. This will help keep fraud from occurring and will improve oversight of individual decision-making accountability.

—Training and Performance Support Systems (TPSS), an ongoing multi-year training initiative for employees working in the area of compensation and pension. The effectiveness of this training has been established and it substantially improves the accuracy of the work of those who complete it.

—Initiatives to assist in replacing our antiquated payment system, and provide various improvements to existing technology used in this environment.

Funding is included for the enhancement of education activities intended to improve stakeholder and customer satisfaction. Building upon the EDI/EFT initiative,

funding is included for The Education Expert System (TEES), an umbrella project that will expand our achievements in the area of electronic data exchange and funds transfer, and will make changes to the application used by schools to transmit enrollment information to VA.

This budget contains several initiatives designed to provide much needed improvements in service and accountability to VA's housing program. Included is funding to redesign our Loan Service and Claims processes in order to automate routine activities. Funds are also provided for an ongoing effort to consolidate guaranteed loan servicing at the nine Regional Loan Centers. Other projects include providing a redesign of the Construction and Valuation system; continuing the consolidation of the mortgage loan accounting functions to one centralized location; and enhancing the Lockbox Funding Fee system and a system to provide on-line determinations of eligibility for loan guaranty benefits.

Funding has also been included to support several areas of service that the Vocational Rehabilitation and Employment program has sought to strengthen. These initiatives are designed to improve communications, emphasize outreach, increase access, improve case management, and emphasize the program's central goal of finding appropriate employment for our veterans.

Mr. Chairman, issues regarding the Department's responsibility to procure for claimants the evidence necessary to establish their eligibility for disability and death benefits are also of concern to many. What responsibility do claimants, and those advocating on their behalf, have to first demonstrate their claims are plausible before significant Government resources are devoted to the claims' further development? Should the Department's obligation be the same regardless of a claim's plausibility, or should VA resources be devoted to those claims most likely to prove meritorious? The answers will directly affect our ability to award benefits in a timely manner to deserving claimants.

On December 2, 1999, we published for public comment a notice of proposed rulemaking concerning well-grounded claims and VA's duty to assist claimants. Consistent with currently controlling judicial precedents, the regulations we have proposed would include important exceptions to a general rule that claimants must present plausible claims before the Department's duty to assist arises.

First, under the proposed rule, there are certain types of assistance VA would provide without regard to whether a plausible claim had been submitted. VA would routinely procure service medical records in claims for service-connected disability or death benefits, and would obtain records of any VA medical treatment identified by a claimant.

Further, if VA determines a claim is not "well grounded," which is the legal term denoting plausibility, a claimant would be notified of the types of evidence they would need to present to make it so. In addition, our proposal exempts certain claimants from the well-grounded-claim requirement: those whose claims are filed within a year after service separation, and certain specific categories of others, such as the terminally ill and those unable to afford medical treatment, for whom the burden of producing evidence may be especially onerous.

Within the dictates of current law, we have attempted to strike an appropriate balance between the obligations of claimants for Federal funds and their claims representatives and those of the Government they honorably served.

We are hopeful that, with input from veterans and their representatives, we can develop a final rule that will be both acceptable to veterans and administratively feasible. Should Congress judge the outcome of this rulemaking unacceptable and contemplate shifting more of the evidentiary burden onto the Department, we ask only that consideration be given to the resource and performance issues, which would necessarily accompany such a change in law.

Our veterans deserve a dignified and respectful final resting place. The final resting places we provide for them—our Nation's VA cemeteries—are national shrines and must be maintained in a way that does honor to the men and women who are buried there.

The budget requests $110 million, $13 million more than the 2000 enacted level, for the operation of the National Cemetery Administration (NCA). This 13 percent increase will reinforce our national shrine commitment by beginning an extensive renovation of the grounds, gravesites and grave-markers at cemeteries where the most need exists.

New national cemeteries at Albany, NY; Chicago, IL; Dallas/Ft. Worth, TX; and Cleveland, OH will be fully operational in 2001. We will begin master planning on sites in Atlanta, GA; Detroit, MI; Miami, FL; and Sacramento, CA.

One of VA's strategic goals is to assure that national cemeteries are shrines dedicated to preserving our Nation's history, nurturing patriotism, and honoring the service and sacrifice veterans have made. In order to achieve this objective, it is nec-

essary for NCA to address some deferred-maintenance needs. Improvements in the appearance of burial grounds and historic structures will be accomplished with an additional $5 million requested in this budget.

VA estimates that the annual number of veteran deaths will peak in the year 2008 before beginning to decrease. Consequently, NCA's workload is projected to rise during that period. NCA is preparing for this increase by planning for the construction of new national cemeteries, extending the service life of existing cemeteries, and encouraging states to build state veterans cemeteries.

This budget includes funding and FTE to address increasing interment and maintenance workload at the national cemeteries, including the high rates of increase in interments during the first years of operation at the new cemeteries just completed. The budget also includes planning funds in the Construction, Major Projects appropriation to continue the development of additional new national cemeteries.

VA is asking for $226.5 million for the Office of the Secretary, six Assistant Secretaries, Board of Veterans' Appeals, Board of Contract Appeals and General Counsel. This request, along with $4.4 million associated with credit reform funding, will provide us a total resource level of $230.9 million.

Compared to last year's appropriation, the 2001 request is $20.3 million higher. The budget authority, along with $53 million in anticipated reimbursements, will provide for total obligations of $280 million in 2001. FTE will decrease by 93 in 2001 from the 2000 current estimate of 2,528.

We are requesting $45.9 million in funding for the Board of Veterans' Appeals for 2001. The Board's marked improvement in timeliness in making decisions on veterans claims, its increase in productivity, and its reduction of the appeals backlog from 1995 through 1999 have exceeded our most optimistic expectations.

The budget request will give us the opportunity to continue to decrease the amount of time it takes to process veterans' appeals. BVA and VBA have adopted a joint performance indicator that is a system-wide measure of how long it takes to resolve an appeal made by a veteran. In 2001, we project it will take an average of 650 days. In 1999, it took an average of 745 days.

We are requesting $56.6 million for the Office of the General Counsel. This would include $47.6 million in budget authority, and an additional $9.0 million funded through reimbursements under the MCCF, the Credit Reform statute, and other reimbursable authorities. This level of funding is essential if the office is to continue to meet the increasing demand for legal services required by VA's three Administrations, and if it is to keep pace with its representational responsibilities at the Court of Appeals for Veterans Claims (CAVC).

Increased funding for the Office of the General Counsel will also permit us to address rising demands for representation of the Department in workplace disputes.

For the Office of Information and Technology (OI&T), we are requesting $30.9 million in total obligations and 195 FTE, including $22.3 million in budget authority (156 FTE) and reimbursements of $8.6 million (39 FTE). These resources would enable OI&T to continue to support information technology policy, program assistance, VA capital planning, the nationwide telecommunications network, the VACO campus office automation platform and local network, and other efforts. The Austin Automation Center is separately supported by VA's Franchise Fund.

VA successfully began the Year 2000 without any significant Y2K incidents. VA benefits were paid on time and our health care facilities remained open throughout the date rollover. Having met the challenge of Y2K, our next priority is information security.

In early 1999, VA initiated a Department response to the General Accounting Office (GAO) and Inspector General recommendations on the need for a strengthened VA information security program. A Department-wide working group created a security plan for investment of $83.3 million from 2000–2005 with funding to be redirected from completed Year 2000 efforts.

The plan, which GAO commended, is a comprehensive approach to managing risk through continuous risk assessment, incident response processing, policy development, workforce education, virus protection, intrusion detection, and strong centralized management and oversight. Immediate undertakings have resulted in the establishment of a national Critical Incident Response Capability system, which tracks security incidents; the initiation of a Department-wide assessment of risk; piloting of Web-based workforce security awareness training; and the issuance of strengthened security policies for high-risk areas.

For 2001, the Office of Financial Management (OFM) is requesting $30.9 million in total obligation authority and an average employment of 229. Before I discuss the specifics of our request for OFM, I would like to highlight a recent accomplishment. I am pleased to announce our success in obtaining an unqualified opinion on the Department's Consolidated Financial Statements for fiscal year 1999 and 1998. This

represents a major milestone in improving financial management and reporting in VA and provides sound baseline information to build upon for the future. It also fulfills my commitment to the President to obtain a clean audit opinion on our fiscal year 1999 financial statements in my July 1998 letter. Office of Financial Management staff and the Chief Financial Officer staffs of the Veterans Health Administration and the VBA made a significant effort to make this possible.

The request for OFM includes $29.1 million in budget authority and $1.8 million in reimbursable authority. These resources will allow us to continue our current level of operations and sustain efforts on critical initiatives underway. Reimbursements will fund financial operation and program reviews, and will allow us to provide assistance in financial policy development and oversight. The requested budget authority also includes $2.6 million toward implementation efforts of a new integrated VA core Financial and Logistics System to replace the current financial management system and its interfaces. OFM will coordinate the Department's investment in this area. In 2001, the total investment of approximately $57 million will fund specific tasks for the acquisition (Phase III) and the prototyping and implementation (Phase IV) phases of the project.

We are requesting $13.9 million and 65 FTE to support the activities of the Office of Planning and Analysis (OP&A). With these resources, OP&A will continue to facilitate the Department's strategic planning process; provide actuarial and analytical support to VA program offices; conduct statutorily required program evaluations; coordinate corporate management improvement activities; and support the development, analysis, and review of issues affecting veterans' programs.

Funding increases for 2001 will support expanded analyses and reports of data collected in the National Survey of Veterans, which will be conducted in 2000. Additional funding will be used to enhancing data development and actuarial services so that VA program offices and others will have available more sophisticated demographic and socio-economic information about veterans. This will improve our service-delivery planning.

Increased funding will also support a continuous environmental scan process, including stakeholder consultation sessions and focus group meetings, and an ambitious schedule of program evaluations mandated by Title 38 and the Government Performance and Results Act.

The Office of Human Resources and Administration (HR&A) is requesting $82.8 million in total obligation authority and an average employment of 579 FTE. The requested budget authority for HR&A is $51.4 million.

Included are requests for additional resources to carry out several initiatives, such as developing and implementing strategies to prevent discrimination complaints; developing a Departmental workforce succession planning and decision system; conducting the Department's next One VA organizational assessment; conducting VA's next Human Resources conference; and maintaining and testing the Department's Continuity of Operations Plan for assuring essential emergency services.

The total figure for HR&A reimbursements is $31.4 million. This includes $27.8 million and 260 FTE for the Office of Resolution Management (ORM) and $3 million to complete development of the department's HR LINK$ personnel payroll system. In 2001, the Department is again requesting that the operations of ORM and Office of Employment Discrimination Complaint Adjudication (OEDCA), located in the Office of the Secretary, be funded through reimbursements from its customers.

In summary, a total appropriation of $1.062 billion is requested for General Operating Expenses (GOE); $835 million for VBA and $226.5 million for General Administration in 2001. This funding level, combined with $168 million of administrative costs associated with VA's credit programs, funded in the loan program accounts under credit reform provisions; $9.8 million in reimbursements from the compensation and pensions account for costs associated with the implementation of the Omnibus Budget Reconciliation Act of 1990 as amended; $36.5 million from insurance funds' excess revenues; and other reimbursable authority, will provide $1.359 billion to support operations in the GOE account.

Our Franchise Fund completed its third year of operations on September 30, 1999. The six lines of business, our Enterprise Centers, are proving to be very successful. Sales to federal entities have dramatically increased since our initial year of operations in 1997, from $59.1 million to $97.3 million. The 1998 financial statements of the Fund were audited by a private sector CPA firm. The audit resulted in an unqualified, or clean, opinion. On October 1, 2000, the Shared Services Center (SSC), which will support the implementation and operation of the HR LINK$ personnel payroll system, will join VA's Enterprise Centers.

The 2001 request for the Office of the Inspector General (OIG) contains total resources slightly over $49 million. The request includes direct budget authority of

$46.5 million and planned reimbursements of $2.6 million, which supports average staffing levels of 369 and 24 positions, respectively.

This funding provides OIG with an increase of $1 million for nine positions. The request will assist OIG in expanding oversight in the quality of health care services rendered our veterans, identifying internal control vulnerabilities in benefit payment processes, and detecting fraud through extensive review and analysis of VA databases and matching initiatives.

We are requesting new budget authority of $309 million for the Department's construction programs. Our request provides funding for two major construction projects and another $10 million for an effort to assess our medical infrastructure needs for the future. A 10 percent increase above last year's requested level is included for minor construction and the grant programs for state veterans' nursing homes and cemeteries.

We are requesting new budget authority totaling $62 million for the major construction program. The major construction request includes funding for a seismic corrections project at Palo Alto, CA and a gravesite development project at Ft. Logan National Cemetery in Colorado. An additional $10 million is requested in planning funds to continue the Capital Asset Realignment for Enhanced Services (CARES) studies. Congress initially provided $10 million to begin these market-based assessments of health care requirements and capital needs in 2000. The 2001 request also includes planning funds to continue the development of four new national cemeteries, to be located near Atlanta, GA; Detroit, MI; Miami, FL; and Sacramento, CA.

Additionally, we are requesting new budget authority totaling $162 million for VA's minor construction program. The request will be used to make improvements throughout the Nation to our medical centers' ambulatory care settings, patient environment, and aging infrastructure. Funds have also been requested for nursing home care, clinical improvements, correction of code deficiencies in existing facilities, and the elimination of fire and safety deficiencies at our facilities.

Funds requested in the minor construction budget will also support VBA and staff office construction requirements, and gravesite development and improvements at existing national cemeteries. In addition, as a result of the expanded authority provided by the Millennium Act, minor construction funds may be used to make capital contribution payments for enhanced-use lease projects such as the new regional office building at Milwaukee, Wisconsin.

The 2001 request of $60 million for the Grants for the Construction of State Extended Care Facilities will provide funding to assist states in establishing new nursing homes and domiciliaries or renovating existing facilities. The 2001 request of $25 million for the Grants for the Construction of State Veterans Cemeteries will provide funding to assist states in establishing, expanding, or improving state veterans cemeteries.

Mr. Chairman, for 224 years, America's men and women in uniform have brought a record of security and peace to the North American continent that is unmatched in the history of the world.

I believe this budget meets the needs of the Nation's veterans and lives up to the commitment we have to them.

I want to thank the members and staffs for your continued interest in our Department's needs. I look forward to continuing to work with you on behalf of our Nation's veterans and their families.

I also want to thank the Veterans Service Organizations for the vigorous efforts they have made on behalf of veterans during the appropriations process, and I look forward to continuing to work with them on these issues in the future.

Thank you for your time, and your consideration.

ALLOCATION OF MEDICAL CARE FUNDS

Senator BOND. Thank you, Mr. Secretary. We'll try to take advantage of all these great opportunities.

There are several areas of your budget where VA is spending far less than what you told us you would in 1999 and the current year, even while we increased the overall budget by $1.7 billion. Let me give you a couple examples.

Post-traumatic stress disorder, VA spent $87 million in 1999, when you told us last year the estimate was $109 million. VA is estimating that it will spend $94 million this year, while last year VA estimated it would spend $113.5 million in 2000.

In the substance abuse treatment area, last year you told us VA would spend $411 million in 1999, yet the actual 1999 expenditure was $357 million. The 2000 estimate had been $427 million and currently VA estimates it's going to spend about $373 million. The homeless compensated work therapy program, you now estimate you will spend about half of what was estimated for fiscal year 2000.

These programs are highlighted in the budget because they're national priorities that you've identified, critical to veterans. I'd like you to address the following questions:

Why isn't VA allocating its budget consistent with its own budget justification? How can we be sure that through the VERA allocation system that VA networks and individual hospitals are allocating sufficient funds to these national priorities, and why shouldn't we be funding these national priorities separately from VERA?

Secretary WEST. Let me make a preliminary response, Mr. Chairman. I suspect Dr. Garthwaite, who oversees that administration, will want to speak more specifically.

The first and easy answer is, we should be spending the money the way we tell you we're going to spend it when we come up here to ask for it. It seems to me that's the whole purpose of this process, and that if you get to a point in this committee where you cannot trust our best good faith estimates, and that we will live up to them, then we will be in great trouble.

I think the first answer is, I believe it is our intention to do what we say we're going to do with the funds, it is then our best effort to follow through on it. I think you are going to want to know more than our best efforts, though; so I will let Dr. Garthwaite try to address these directly.

Dr. GARTHWAITE. Thank you. I think there are probably three or four reasons, perhaps, that contribute to this. I think at the beginning of last year, many of our FTE hires were delayed somewhat because of the initially presented budget and the plans that we had for that.

But I think the two key pieces are (1) our data systems; and we have been working diligently to put into place a decision support system. The decision support system is now fully operational in most VA medical centers. And we're in fact going to use fiscal year 2000 DSS data as the base for future allocations so that the intensity and interest by our managers in getting the data in DSS so that we have a more complete base for our budget allocation decisions.

The final thing I would mention is that the issues tend to be quite complex. Our initial runs at trying to understand how much we were spending on Hepatitis C, for instance, used diagnostic codes. And when we went back and saw how many people were identified with primary diagnosis of Hepatitis C under specific diagnostic codes and compared that to our laboratory data systems and found out how many people actually had a positive test, we found a significant discrepancy.

So today we have the list of patients with positive tests being sent to the financial folks, who work from the diagnostic codes, so

we can begin to compare and understand and correct the discrepancy.

HEPATITIS C FUNDING

Senator BOND. I was just looking at the Hepatitis C because in the first quarter, your figures show that the total amount spent was $8.6 million and for all of 1999, as I said, it was only $26.8 million, but we had obviously a much greater indicated need and provided much more money.

Will that solve the problem?

Dr. GARTHWAITE. I think it will make a significant difference. Just to give you an example, in fiscal year 1999, by pulling out diagnostic codes only, we found 25,000 patients treated for Hepatitis C. We know that the number of unique patients that we diagnosed was closer to 60,000. So we are only accounting for about half of them with the diagnostic codes.

If you came in with a primary diagnosis coded as cirrhosis, and the computer also included Hepatitis C as a diagnosis, and the major reason you're in there is end stage liver disease from hepatitis, we have to make sure that when we do the necessary analysis so that both the clinical people and the analytical people capture the Hepatitis links. I think that is what we've accomplished; we have figured that out and we are hard at work making sure that we capture all the actual workload.

Senator BOND. This is a concern. Do we have to line item it to make sure that the networks actually do spend it? How are we going to make sure that sufficient funds are allocated to a national priority?

Dr. GARTHWAITE. I believe that, we've made it exceptionally clear. We have in place now a registry so we will be able to track each patient. We'll very shortly be able to marry our database that identifies who has a positive test with the database that identifies who got medications. So I think that we will be in good shape to double-check to make sure that a patient who has a positive test either gets the drug or we have a reason for not providing it.

Senator BOND. Thank you very much.

Secretary WEST. Mr. Chairman, I might just say that when we have instances like this where the question is: Are we able to get sufficient and timely data for you that indicates that we're following through on the spending patterns the way we said and to give you a sense of what we are seeing? It is not unusual for us to undertake some sort of a regular report on workload, and get it to you on some sort of a quarterly basis so that your people, and you are able to follow with us what our experience is. It may be more reliable data, it may be better than trying to seek some other way to put in controls before we know what we're dealing with.

Senator BOND. It's not just us, I hope you get the information yourself.

Secretary WEST. Yes.

Senator BOND. Let me turn now to Senator Mikulski.

MEDICAL CARE COLLECTIONS

Senator MIKULSKI. Thank you very much, Mr. Chairman.

Mr. Secretary, we presume that, and maybe unfairly, that this will be your last appearance before—but we do know that a year from now we will have a new president and so on. But I would really like to thank both you and your entire team for their professionalism and their work with my staff in trying to determine how we can often in tight years really serve our veterans.

So I would like to thank each and every one of them for their competency and their professionalism in dealing with this.

Let me ask a question about medical care and the budget, and it will go to the collections from third parties. Wherever we go, the veterans organizations and service organizations and so on, the word is always "more." What can we do more, what can we do better, the rising cost of prescription drug benefits that we are grappling with and maybe we all be grappling with in Medicare.

There is a limit to our budget, so this then takes me to "Where can we get our money?" And takes us to the collection aspects. Could you tell me what is the current status of VA's efforts to increase collections, what have we seen from your plan to increase recoveries, and what can we expect? Is it that we don't have the right systems from VA to collect the money, or do we have deadbeat third parties?

Secretary WEST. I am going to let Dr. Garthwaite speak to that, but I want to——

Senator MIKULSKI. He liked that last phrase.

Secretary WEST. He does. First of all, I think we are getting to the point where we are better at predicting how much we will be able to collect, and at making hardheaded, accurate estimates.

For one thing, we have learned from experience. We have put in changes so that our billing is done better, more professionally. Additionally, I will say that we have to remind ourselves at VA that this is not a core competency of VA or of VHA; we're learning, but we are also continuing to have to look at something you just mentioned—the best ways of making these collections. Do we need to contract it? Do we need to have other ways of doing it?

I know that our networks have tried both ways; and I'll let Dr. Garthwaite take it from there.

Dr. GARTHWAITE. Thank you. I think there are several issues here. One is that because we for many, many years did not bill, it has taken us a while to get better at billing. We're still not all the way there, but I think we've made significant progress in the last year.

We have gone through the issue of teaching everyone how to do the proper documentation to support the bill rendered, and that's a key piece in collection. Second, I think we implemented reasonable rates which should help significantly with collection efforts. That also took us some time to get going, but in January of this year we sent out bills for a 14 percent greater amount than we did in the January of last year, and for February, 23 percent greater than in February of last year.

So we think we may have turned the corner. We believe these are optimistic signs that the compliance efforts and the reasonable billing rates have both helped.

There are certain parts of the process namely, the end in the collection area where we don't think we're necessarily the best at

doing that, and we would be willing to look at possibly contracting it out. There are a lot of human resource and personnel issues related to that.

Senator MIKULSKI. Well, thank you very much, Doctor. I think that this is a big issue, and it's a big issue of how we can make highest use of professional staff at VA, new technologies and new infotech technologies in terms of identifying what needs to be collected and how is the best way to do this.

I feel very strongly that this should be a very important revenue stream, and it is essentially VA getting its fair share from third party contracts.

I know that—I see that flashing yellow light here. One that I need you to get back to me on, on two issues.

DISCRIMINATION ALLEGATIONS

Mr. Secretary, last year about 20 VA employees, working under one assistant secretary at VA came to me with allegations of discrimination at VA. And we wrote you about this, asking you to review the companies, and let me get to where I want to make my point.

We received an interim response from Eugene Brickhouse saying that they were looking into it. Then also this was assigned to a Miss Gibson, who has sent an interim draft. And there seem to be some issues resolved and some not.

Mr. Secretary, knowing of your own commitment, your own memorandum to staff and so on, could you look into this? Because it seems to come from one place at headquarters. I don't want to elaborate on it here, we'll be able to talk with you privately about it—and I would like to have this response from you: Number one, that you've looked into it; number two, that corrections are being made about those 20 complaints. That where it has been directed at one spot and primarily one person and one culture within that area, that the corrections have been made, and we'll get you the specifics after the hearing.

FORT HOWARD VA MEDICAL CENTER

The last point I would like to make where we need help back, and then yield to the next senator—the biggest issue in Maryland right now is the future of Fort Howard Hospital. We know that it needs a new mission, a new direction, and so on. What we are facing, though, is confusion because of VA organization.

There has been submitted to headquarters a desire for there to be declared a new mission. There is supposed to be an answer on that. We really need to have that answer. Number two, VA in Maryland has yet reorganized itself to delineate activity. We have no idea who was in charge of the Fort Howard project. It used to be Mr. Dennis Smith. We are not going to pick your leadership team for you, but we need a one-stop shop with Fort Howard and a one-stop shop leader who doesn't say, "It's all up to headquarters," and then goes out to the veterans and say "it's up to headquarters and Mikulski." It's not up to Mikulski. But if it's going to be up to Mikulski, the first thing is we need to know what is the mission, who was your projects director, and then make highest and best use of this really grand facility.

Can I have your help on this?

Secretary WEST. Yes, you can, Senator.

Senator MIKULSKI. Thank you very much.

Senator BOND. Thank you, Senator Mikulski.

Senator Burns.

Senator BURNS. Thank you very much, Mr. Chairman.

FUNDING FOR RURAL HEALTH

Mr. Secretary, last year there was language inserted in the appropriations bill that directed you to do a study of some of the problems we face in rural areas where we are a long way from health care facilities.

That report was due to us about the end of this month, the 21st of April. Could you give me a progress report on that, and are you going to make the deadline?

Secretary WEST. Dr. Garthwaite.

Dr. GARTHWAITE. I believe this is the one related to funding for rural health?

Senator BURNS. Yes.

Dr. GARTHWAITE. We do have this particular report in headquarters and we plan to make the deadline.

Senator BURNS. Okay, I would be interested in that, because we have a couple of questions that we talked about the other day and there are a couple more.

PRESCRIPTION POLICY

We are having a hard time in getting our prescriptions filled. In other words, prescriptions that are written by a private doctor under his consultations, and then getting those filled.

Can we allow these veterans to have their prescriptions issued by a private doctor and filled at a VA pharmacy?

Dr. GARTHWAITE. VA has never really believed it should fill prescriptions other than for patients who are under VA care.

Secretary WEST. That is probably not Dr. Garthwaite's fault, it is probably the fault of our general counsel—not this one.

In the late Eighties, and I will count on her to correct me, VA's general counsel did an opinion about that practice and I think the prevailing opinion is that Dr. Garthwaite's doctors are not a pharmacy; they are part of a continuum of care. They can write prescriptions for patients for whom they are caring, who come in, who have enrolled.

Once they've had that first prescription, of course, they could mail in the refills from all over if they would like. So what may be the solution for us is to try to get our doctors even closer to those veterans who are far away from the hospital where they can be treated.

EMERGENCY CARE

Senator BURNS. We know in some States that is going to be almost impossible to do, so we are going to have to do something to develop that.

Just to take that one step further, we have an arrangement now under emergency conditions. If a veteran needs health care he can

go to a local facility and that will be reimbursed by the VA. If we close up at 5 o'clock and it's on a Saturday night or whatever, we have people and they're sick, they don't care whether it's service-connected or not. That would have to be determined later, but we are having a hard time in making those connections or working that out.

Do you want to respond to that, how we're taking care of that?

Dr. GARTHWAITE. In cases where someone's receiving service for a service connected condition, we can fee basis out their care, that means they can see someone in the local community, we give them a card, and we will fill those prescriptions.

If we become the pharmacy for every veteran, then that will require significant resources, and some veterans who rely on us for their care will go by the wayside unless there are appropriations to compensate for those additional dollars. It's a very expensive position to put us in. There are 25 million veterans, all of whom would love to get free prescriptions.

So if the difference between the 25 million who are out there, who have prescriptions and would like them free, and the current 4.2 million who are enrolled in our system, that would be an enormous undertaking to do in any fair fashion.

Secretary WEST. It seems to me, Senator, that you are raising a problem, though, that we should be able to try to look at and work with. It is the question of whether we are delivering the services to a veterans population that is disbursed, like Americans, they live where they want to live. Your State is an example, but we have similar challenges in other States—whether there is some way to address that.

For example, you have already addressed the emergency care problem to some extent in the Millennium Act, I think now emergency care is not just service-connected, it's just whoever is enrolled according to the Millennium Act that you passed last fall.

So the real question in emergency care is veterans who are not yet enrolled. In fact, the problem with pharmacy care is the same thing, the prescriptions. Veterans who are not yet enrolled in the system. If we can deal with that part and somehow make them able to become part of the system, then we may be able to help out there. I think we need to look at the particular circumstances.

Senator BURNS. Yes. Are you comfortable with the way you are dealing with emergencies now, that are away from a VA hospital?

Secretary WEST. I saw a head shake over there, from Dr. Garthwaite.

Dr. GARTHWAITE. Well, no, because until we implement the Millennium Act later this spring, there is really no way for us to pay for emergency care for the non-service-connected. We believe that people shouldn't have to worry about how far they're going to drive when they are ill, they should go right to the emergency room, the closest one, if that's the medically appropriate thing to do.

We believe that the Millennium Act will fix that, and we think that's an important piece of legislation.

Secretary WEST. But we have got to get them enrolled.

Senator BURNS. Those are areas where we have the most concern, Mr. Chairman and, of course, we are talking about distances. We realize that change comes slowly. We understand that, and any

way that we can help facilitate that we sure would. I think sometimes we lose what our mission is, and our mission is to provide medical services to our veterans, and how we get that done is where we run into disagreements.

I thank you for coming today, and I thank you for your service to your country also, Mr. West, and this may be your last appearance—it may not be, who knows? We may see you around a lot.

Secretary WEST. Anything is possible.

Senator BOND. Thank you very much, Senator Burns. We very much appreciate your participation.

Senator Leahy.

STATEMENT OF PATRICK LEAHY

Senator LEAHY. Thank you, Mr. Chairman. I am glad to see the panelists here, and Secretary West, I enjoy the fact that I have always been able to communicate with you and talk about problems, and while not wanting to sound overly parochial, we usually talk about the VA hospital in White River Junction, Vermont. I appreciate you always calling back, and I am glad to see my friend Mike Walker here, we worked together when one of my favorite-of-all-time colleagues, Jim Sasscer was here, we were able to handle all the serious things and Mike, you recall, we sometimes had a few—especially when Jim was on a roll—some very funny lines in the back room. And Dr. Garthwaite, you were willing to come over and meet with me off the floor on one occasion when it was very important, and I do appreciate that.

I will continue to say now, I know we are going to be running out of time so I am going to submit questions for the record—but I would urge that we continue to look at the geographical differences in the VA medical system. It really is not—I realize I preach to the converted with this panel—but it isn't a one-size-fits-all, sometimes it is a difference of accessibility, even of climate. The situations and problems you may have in Florida and the Southwest or anywhere else it may be a lot different than the Northwest or the Northeast and colder climates. It doesn't mean that there are not needs in both places, but they are different needs.

I would look at things like the rural health care initiative and see the effects of different health care models based on where the people are. And I look forward to seeing the results of that kind of study.

PATIENT SAFETY

I also was concerned—Mr. Secretary, I know you were—about the reports last year of the prevalence of medical errors in the VA health care system. They put the errors somewhere around 3,000 from June 1997 to December 1998.

Now I'm not suggesting that VA is getting more or less problems than the civilian sector, but I worry about misdiagnosis, wrongly filled prescriptions, other types of mistakes. I know it could have been anything from a hurried prescription written down to illegible handwriting, whatever it might be.

We have things like so-called clinical couplers, the technology that may provide a solution to that. It's the kind of software that the doctor writes this, the pharmacy—it couples up the nurse that

may actually be delivering it, sees all of this and suddenly the red light goes on and says "Wait a minute, somebody else has also prescribed this, which would be fatal." I mentioned before, my wife is a nurse, she has found—usually she is grabbing a Merck manual and doing twenty different steps to see if the medicine is the right thing; sometimes people don't take that extra step.

Can you give us an idea of how such couplers might help you?

Secretary WEST. Oh, yes, and I think Dr. Garthwaite has some things to say about bar coding as well.

Dr. GARTHWAITE. We met with Dr. Weed and his staff last week, and have been working with the Department of Defense to look at the PKC coupler system. The reports I received have shown that we are fairly favorably impressed with what it can bring, and we will have to look at how it might integrate it into our system. But to the extent that we can find things like that, it helps us.

In terms of patient safety, I think it is important to realize that VA leads the way. That the report that showed 3,000 adverse events, not all of those were errors and not all of those were preventable with today's state of knowledge. So that has been widely misquoted in the media as all errors, and reading the report carefully I think you will be able to see the distinction.

The positive things we are doing are bar coding for medications, computerized entry of prescriptions and other data, research on what errors might occur and how to prevent them, especially the human factors engineering, which has never really been applied to medicine.

Finally I would say we have in place a fascinating and important new reporting mechanism. One that teaches people not just to report but that it's safe to report, and one that teaches them how to actually look for the root cause.

By history we blamed people and assumed we could train them to be perfect, and I think today we realize that people will always make some mistakes and we need to reengineer to provide the safety nets.

VERA ALLOCATION IN NEW ENGLAND

Senator LEAHY. Some of the things you are talking about, bar coding, color coding, a number of other things can dramatically reduce the accidents.

The other thing, and I would like more of an answer for the record, but the medical care funding allocation that VA uses, I think it really shortchanges New England, and equipment renovation. It divides funds based on patient volume—well, not only are our hospitals older, we're an older part of the country, our hospitals are older. But when it's 25 below zero and you are moving from A to B, and you have had a foot of snow the night before—which happens. I was going to my office in Vermont one time this winter when we had had a foot of snow within the last 24 hours, it is now 24 below zero—everything is open, everybody is expected to get to work, but even in Vermont it takes a little bit of effort.

I would ask you to look at this, because if the allocation is just on patient volume, then VA medical centers across our region are going to suffer some very serious budget shortfalls every year. And I think you have to have more in the allocation models than just

volume. And I'd ask you to respond to that if you could for the record, because I think it's something we should look at in this committee.

[The information follows:]

VERA ALLOCATIONS IN NORTHEAST

Energy Costs.—Department of Veterans Affairs (VA) reviewed this issue on numerous occasions and found that because there is not significant variation among networks, specific energy allocations would not change the final outcome. VA does recognize that energy costs have risen sharply in the last couple of months and are having some affect on the network costs more heavily in the Northern areas. VA is monitoring this to see if the costs begin to rise in the Southern areas as warmer weather sets in. Comparing the last 12 months with the previous 12 months, the average national energy cost increase was 7.5 percent and the cost increase in Veterans Integrated Service Network (VISN) 1 was 6.8 percent.

NRM Costs.—Funds are allocated on a basis of patient volume adjusted for regional costs of construction and renovation. Building age previously was a factor in this allocation process but was phased out because it was not making a material difference in the network allocations.

Equipment Costs.—Funds are allocated on the basis of patient volume. Equipment needs are directly related to the level of patient care services.

Veterans Equitable Resource Allocation (VERA) was designed to be a workload-based allocation system and efforts have been to strive towards a system where allocations are in line with patient need.

Senator BOND. Thank you very much, Senator Leahy.

Senator LEAHY. I have other questions to submit for the record.

Senator BOND. Please, yes. We will be submitting some for the record as well.

SCREENING FOR HEPATITIS C

Mr. Secretary, in June 1998, VA issued a mandate that all veterans seeking care were to be evaluated for HCV risk. According to the Inspector General, VA hospitals are not uniformly screening all veterans who seek care.

Why, and again this points to a huge problem. There seems to be a disconnect between a national priority and what's really happening where the rubber hits the road.

Dr. GARTHWAITE. Mr. Chairman, we've undertaken many initiatives to make sure that every veteran gets screened. We've had a satellite broadcast to let our staff know what is expected, we've trained physicians, brought them to Washington. We trained counselors and pharmacists last week, and we have primary care M.D.'s coming to a conference on Hepatitis C very shortly.

By the end of next month, we are introducing a patch to our electronic data system that whenever a patient's record is electronically accessed, the provider is automatically reminded they need to check one of four boxes, two of which are: "is going to be screened," "wants to be screened." The key questions will be asked of each clinician interactively at the time patients are being seen.

So we have screened a significant number of patients. In fiscal year 1998, we tested approximately 113,000 and detected 27,000 unique veterans with Hepatitis C. In fiscal year 1999, we tested another 176,000 veterans and found 32,000 unique veterans with Hepatitis C, and this year we've already tested 37,000 veterans and found an additional 8,000 with Hepatitis C.

We continue to have outreach efforts, both with the American Liver Foundation and we've received some publicity help from the

current Miss America who is very interested in veterans issues. We ourselves go out into the community. We are finding that the community efforts don't yield a large number of veterans, and a lot of the veterans that do surface are already in our system. We'll continue our efforts.

Senator BOND. Can you assure me that you will follow up to make sure that what you say is a national priority and what we fund as a national priority actually gets done in the field?

Dr. GARTHWAITE. Absolutely.

Senator BOND. Do we have that commitment?

Dr. GARTHWAITE. [Affirmative, nonverbal]

Senator BOND. All right, we will remember that. Thank you. I don't say that you won't, I just want to make sure that we are clear on that, and that we understand that.

NURSING HOME CARE

Mr. Secretary, as I mentioned in my opening statement, it's my understanding the VA places veterans in private nursing homes when they can't be placed in a VA-operated facility. In doing so, the VA conducts its own evaluations of the homes to ensure that the nation's elderly veterans receive the quality of care that they so richly deserve. Furthermore, nursing homes under contract with the VA are evaluated annually. Follow-up service is provided by VA staff who visit the veterans homes on a monthly basis.

As I indicated, I've been concerned with the quality of care, and the regulatory lapses that have occurred in other Federal agencies and in State agencies. It seems to me that VA's evaluation and follow-up services would be helpful to other elderly residents in problem homes.

Does the VA currently share its evaluations and observations either with HCFA or with State agencies? Is there a centralized system in place where the information and data can be integrated?

Dr. GARTHWAITE. We have completed a draft directive that mandates that we share all this information, and it will be going out as soon as it clears. But we agree with you and think it's important.

Senator BOND. I thank you for that, because I think it is very important that the VA, which already uses HCFA and State agency information, should likewise share their evaluations and observations. It makes sense, and it would seem that coordination would encourage rigorous monitoring of problem nursing homes.

MANAGEMENT EFFICIENCIES

Mr. Secretary, one last major question. You assume in your budget $360 million in management efficiencies. We've received no details as to what these efficiencies are. It's tough for us to assess them. When will we see the specifics? Are you confident that the budget you proposed is adequate and would not require inappropriate cutbacks?

Dr. GARTHWAITE. We believe we can do these efficiencies. We have a large budget, and health care is not optimized in terms of all the processes within it.

A part of these are energy savings. We find that we can sign energy contracts by putting in new electronics and so forth, control-

ling lights and other things and can save a fair amount of money there.

We can have continued integrations and realignments and other movements for using automation that help us. It is a little like, I think you said earlier, pushing a rock uphill to make changes because it does affect employees and other things. So it is hard work to make a lot of the efficiencies, but we think there are opportunities and we think what we have on the table this year is realistic.

Secretary WEST. In response to the last part of your question, yes, we believe we can do very well with this budget, Senator. We don't expect to have panicky moments when we're looking to cut here in order to fund somewhere else. If there are changes in the system, in our health care system, they will be so that we can do our job better.

Senator BOND. And you will implement best practices?

Secretary WEST. Yes.

Dr. GARTHWAITE. Yes, sir.

Senator BOND. Senator Mikulski, do you have——

PRESCRIPTION DRUG BENEFIT

Senator MIKULSKI. One final question, and this goes to a prescription drug benefit, and maybe it requires a detailed written answer.

As you know, we're considering adding a voluntary prescription drug benefit to Medicare. There is no doubt about the compelling human need, particularly for the management of chronic conditions—blood pressure, cholesterol, diabetes, et cetera.

Here's the question: Whatever we embark upon must be affordable to the taxpayer and affordable to the patient, and must be sustainable. How has VA been able to control costs in a way that has kept at least some financial discipline on the prescription drug benefit for our veterans? And what are the lessons learned as we embark upon a medicare expansion to date?

Secretary WEST. I know Dr. Garthwaite wants to answer that, because VHA is particularly proud of what they've done. I would say in one word the formulary, but I should let him say it in greater detail.

Dr. GARTHWAITE. I think we have used several strategies. We have clear clinical guidelines and we expect people to adhere to these guidelines which spell out which drugs are effective, and which effective drugs to use first.

Second, to not provide every possible drug on our formulary, but to drive that process with very bright clinical involvement. So we use some of our best front line clinicians who are actually prescribing to help select the drugs for the formulary. The good news about all that is, the recent drug that was pulled off the market for diabetes, we recognized that we shouldn't have that on our formulary. We didn't put it on the formulary, and in fact we were so concerned we put out guidelines for its use off formulary.

So I think the formulary process worked very well in that instance. Then I think the third strategy we have used is that if we can limit our choices and commit to a certain volume, we can negotiate pretty good prices, and we have done that both alone and

more recently in partnership with the Department of Defense, to save the taxpayers a lot of money.

Senator MIKULSKI. Well, thank you, Doctor. If you could, I'd like to have a paper or something on this, because I think there are really very important lessons learned, both in the area of formulary issues which are quite complex and should never be political. Number two, though, the negotiation of price without formal price controls, stifling innovation, and someone—we are going to have a lot of big issues ahead of us, and we can't just do slogans and bumper stickers and so on. So we appreciate whatever lessons are learned. Thank you very much.

Dr. GARTHWAITE. Thank you.

[The information follows:]

PRESCRIPTION DRUG BENEFIT

VA'S NATIONAL FORMULARY PROCESS: LESSONS LEARNED FOR A SUCCESSFUL MEDICARE DRUG BENEFIT

The basic premise of Department of Veterans Affairs' (VA) approach to formulary management has been and remains the provision of quality medical care at an affordable price through the appropriate use of pharmaceuticals in the veteran population. Formularies are not a new component of healthcare delivery systems in either the private or public sector. The Veterans Health Administration (VHA) has employed drug formularies for over four decades. What has changed over time is formulary management. In the distant past, the sole function was to define what drugs could and could not be prescribed. More recently, formulary management has included clinical protocols to assist clinicians in using drugs effectively and efficiently and is continuing to evolve.

One of the many positives to formulary management is solid clinical evidence demonstrating that a specific drug can provide a cost-effective benefit to a patient population. The result of this is the ability to negotiate lower drug acquisition cost. As indicated earlier, VA's primary motivation is always to improve the quality of care. Economics, though important, has become a secondary issue. This change in philosophy is a major reason that VA pharmacy expenditures have risen over the past few years and, VHA officials believe will continue to rise during the foreseeable future.

Formulary management today not only includes the functions above, but also seeks to develop the means to measure and improve disease outcomes associated with pharmaceutical care. Moreover, formulary management has become far more dependent on evidenced-based reviews and practices than ever before. This is part of the overall strategy to improve healthcare delivery, especially as it pertains to caring for large populations with specific diseases. No one to date has perfected such a strategy, but to work toward this goal established the Pharmacy Benefits Management (PBM) Strategic Healthcare Group (SHG) in September 1995. The PBM is composed of a twelve member Medical Advisory Panel (MAP) comprised of field-based practicing physicians, including one member from the Department of Defense, clinical pharmacist specialists, data based managers and contracting experts.

A fundamental part of the overall strategy in establishing the PBM was to create a comprehensive pharmaceutical coverage package for the VA system. The reasons for this are fourfold. First, this ensures that all veterans, no matter where they are in the United States, will have the same potential access to important pharmaceuticals, over-the-counter medications and medical-surgical supplies. This improves overall equity of care and reduces the likelihood that patients will be denied drugs or other items because of local economic considerations. However, the national formulary process is not all-inclusive, but rather, with few exceptions, allows Veterans Integrated Service Networks (VISNs) to add pharmaceuticals that may be important to selected populations within their region. In addition, VA's formulary management system includes a responsive and locally directed non-formulary approval process. While VA's goal is to include on its formulary those medications which best serve the needs of veterans, the non-formulary process addresses those situations and patients where the formulary drug does not produce the desire clinical outcome.

Second, our strategy ensures that the VA healthcare system will have a coordinated approach in determining the optimal use of pharmaceuticals for patient populations with specific diseases. An example of this coordinated approach is the PBM/

MAP's recommended protocols for treating diseases commonly found in veteran patients. These protocols include pharmacologic guidelines on Diabetes, Hypertension, High Cholesterol, Heart Failure, Prostatic Hypertrophy, Depression, Ulcer Disease, Gastroesophageal Reflux, and Osteoarthritis (pending). These evidence-based guidelines, developed in collaboration with physician experts, are being used by many VISNs to help improve and measure the quality of care.

Third, a coordinated approach to pharmacy benefits management means that VA can better organize its purchase and distribution of pharmaceuticals. The PBM SHG has beneficially utilized the power of the entire VA healthcare system to assure the best value possible, both clinically and economically, for selected pharmaceuticals. The grassroots approach, reliance on sound clinical evidence, and the ownership of the organization in the process has resulted in dramatic compliance rates with VA national contracts. This initiative has been a major success for the Department and has had ancillary benefits for the Department of Defense and the U.S. Public Health Service. With regard to distribution, the VHA's leadership and track record in implementing pharmaceutical prime vendor systems and Consolidated Mail Outpatient Pharmacies (CMOPs) is exemplary.

Fourth, a comprehensive formulary management program allows for applied research. Our goals are to continually improve the pharmaceutical benefits package, clinical guidelines and, ultimately, patient care. In this area, the PBM has begun to matrix with established research groups within VA and is also in the process of developing relational software in order to better assess quality of care as it relates to pharmacy and to pharmaceuticals. This process is in its infancy, but we expect VA, as one of the nations largest integrated healthcare networks, to soon lead and influence policy decisions on how to deliver high quality pharmaceutical care to all Americans.

VA's success in formulary management is due to the grassroots nature of its process, buy-in from front line physicians and a commitment to using the best drug(s) possible in the veteran population. As indicated above, the cost of an individual drug is important but it is outweighed through providing the right drug to the right patient at the right time. In this context, VA's pharmaceutical expenditures, as a percentage of its health care dollar, have increased and VHA officials anticipate they will continue to increase. There are many lessons learned by VA that could benefit the Medicare program.

First, a Medicare drug benefit that only concerns itself with the cost of a bottle of pills is doomed for financial and clinical failure. Second, interdisciplinary and multidisciplinary involvement in guideline development and care delivery has and can contribute to the delivery of best value care, including the financial viability of the Medicare program. Third, VAs accomplishments in contracting for selected high cost, high volume pharmaceuticals are successes that can be replicated under Medicare. There is no reason that Medicare cannot contract in this manner to reduce price without impinging on overall quality of care as VA as done. These successes have enabled VA to treat many more veterans, again without compromising patient care. Standardized contracting could be applied across providers and a consortium of states without resorting to federal price controls. Fourth, VA's success in implementing new initiatives for the distribution of prescriptions to veterans has direct implications for the Medicare program. For example, through the use of federal consolidated mail outpatient pharmacies, coupled with the wide-spread use of strategically placed, federally controlled unit of use outpatient automated dispensing technology, the federal government could economically and effectively distribute needed medications to Medicare beneficiaries. The most important part of this strategy for the Medicare program is a matrix of contracts with private sector credentialed clinical pharmacists to work collaboratively with physicians to manage the appropriate use of medications in the senior population. This two-fold approach ensures integrity in the distribution processes (one the pharmaceutical industry would be happy about and embrace from a diversion perspective) and, equally important, develops a relationship between the patient, his physician and pharmacist. If (1) appropriate copayment infrastructure for patients, (2) appropriate risk incentives for providers (physicians and pharmacists) and (3) the ability of the states to form consortiums for price negotiations are a part of the expansion, the potential for a successful, financially viable response to the medication need of this Nation's seniors is accomplishable.

Finally, VA's excellence in geriatric medical practice is well documented. Part of that excellence is the wisdom gained and successful management of co-morbid older patients taking multiple drug therapies. VA truly does have much to offer the Medicare program as it considers expansion to include a drug benefit.

Senator BOND. Thank you, Senator Mikulski.

Mr. Secretary, we are going to have a number of questions for the record. They've called for a vote.

CORRECTING PROGRAM DEFICIENCIES IN ST. LOUIS

Last October, the combined assessment program review by the I.G. identified a number of areas in the St. Louis VA hospital requiring management attention, and I'd like for you to give me in writing an update on correcting the program deficiencies at St. Louis. I'd like to know how VA follows up to ensure the problems are corrected in a timely manner.

I would like your views on the CAP program and whether it's a useful target.

[The information follows:]

CORRECTING PROGRAM DEFICIENCIES IN ST. LOUIS

SUMMARY OF INSPECTOR GENERAL COMBINED ASSESSMENT PROGRAM (CAP) REVIEW CONDUCTED AT VETERANS AFFAIRS MEDICAL CENTER, ST. LOUIS, MISSOURI, JUNE 7–11, 1999

Summary of Recommendations and Responses

(1) Take immediate action to ensure that nurse staffing levels in the Nursing Home Care Unit (NHCU) are always at or above established minimum safe staffing levels.

Nurse staffing levels are kept at or above minimum safe levels by reassignment of staff within the Extended Care Service Line wards, scheduling contract agency staff, and scheduling overtime. Recruitment and hiring has been an on-going process. Staffing needs are reviewed daily and recruitment requests sent weekly as vacancies occur. Recently with the Medical Center's initiative of reorganization, merging and relocation of wards have occurred. This has allowed for additional staff to be assigned to the wards as needed. Patient acuity and program activities are continually monitored to determine staffing needs and readjustments are made.

Office of Inspector General (OIG) STATUS: Closed

(2) Take immediate action to ensure Domiciliary patient privacy needs are met when providing urine samples for drug testing.

A Standard Operating Procedure (Domiciliary SOP #4) has been written to provide guidance on DOA Collection. Procedures have been developed to cover situations when there is no same gender staff member present. For male patients who present concerns regarding specimen collection by female staff members, the specimen will be obtained at a later time, usually this occurs on the next shift. All female patients will have the specimen collected by a female staff person. However, this policy emphasizes the need for sensitivity for all of our patients and attempts to ensure patient privacy to the maximum extent possible. Staff training and orientation has been provided on the procedure. This process has been in effect since July 27, 1999. No patient or staff complaints have been identified since the OIG visit or initiation of the new procedure.

(3) Assess the issues regarding employee safety to determine the adequacy of shuttle bus services from the employee parking lot to the medical center.

Every effort has been made to improve parking for our patrons and staff, particularly during the hours of darkness. The following actions have been taken by management to insure the safety of the staff during hours of darkness.

—Employees working irregular tours of duty, particularly at night, are encouraged to park on VA property and not on the streets or in private parking lots adjoining VA property.

—Police and Security routinely accomplished street and parking lot lighting surveys to insure that lights are repaired as quickly as possible when deficiencies exist as well as to identify areas that need improved lighting.

—Efforts have been made and will continue to be made to improve lighting so as all parking areas used by the staff are brightly illuminated during the hours of darkness.

—Police and Security provides security escorts upon request, regardless of the time of day or night with only one exception and that is during peak duty changeover hours (see next item). Employees arriving for duty during hours of darkness must park in card access only parking lots. When they arrive at the

gates they may, by using the call boxes, request a police patrol be dispatched to escort them to the 24-hour entrance by the Emergency Room (ER). Again, police and security will provide this service at any time except during peak changeover hours (see next item).

—During peak changeover hours, police and security post their on duty officers in the John Cochran (JC) Division parking lots, one in top half of lot "E" (south side of hospital) across from the ambulance parking area, to monitor the staff as they enter/exit the 24-hour entrance. The second officer on duty is posted at the bottom half of lot "E" and monitors employees coming and going from their vehicles in lot "E", "F" and "G".

There have been no incidents where a staff person has been assaulted, molested, mugged or robbed as they negotiated VA owned property to go to and from their vehicles.

In addition, there have not been any incidents of assault, molestings, muggings, or the robbery of anyone who parks on the lots leased by the VA during daylight hours. Approximately half of the employees who park on the Grandel and Sun lots ride the shuttle while the remainder of the staff walks from the lots to work without any problems. Employees are urged to ride the shuttle bus during the afternoon hours, particularly in the Fall and Winter months when it becomes dark earlier in the day.

The facility monitors employee needs regarding the shuttle via general surveys and verbal comments and complaints. Complaints were received previously that identified a need for wheelchair accessible vans. Wheelchair accessible vans are now in use. Comments also identified a potential need to expand services to the Yeatman lot. The stop was added to the driver's route for several weeks. Records were kept on the number of employees being picked up and dropped off at the stop. There were very few employees that rode the shuttle van to or from this stop, thus, it was not adopted as a permanent pick-up stop.

A parking garage would be a great improvement in alleviating the parking situation at John Cochran Division; however, even with a parking garage, safety will remain an issue and if the staff is not alert of what is going on around them, incidents may occur.

(4). Revisit the issue of shared use of the dining room and combined recreational activities for Nursing Home Care Unit patients and Domiciliary patients to ensure this arrangement is therapeutic for both groups.

Recreational activities have been consolidated in the Nursing Home Care Unit (NHCU) for NHCU resident and Mental Health patients. Domiciliary patients do not use the NHCU dining room for any activities. The joint recreational programs for NHCU residents and Mental Health patients was instituted just prior to the site visit. Enhancements have been implemented with the input of the residents council.

Residents now have the option of attending combined recreational activities or program specific recreational activities. The combined activities are monitored by ward nursing staff, recreational staff and the nursing supervisor. Improved scheduling and monitoring of the recreational activities have eliminated this process.

No complaints have been received and no patient incidents have been reported. Residents Council will continue to monitor this process.

(5). Assure that patients are seen by a clinician within 15 minutes of their arrival in the Walk-in Clinic to determine urgency of treatment needs.

We concur that unscheduled patients should be seen by a clinician in a timely manner. The Department of Veterans Affairs "Customer Service Standards", VHA Directive 10–94–102, dated October 14, 1994, establishes a standard that patients will be seen within 30 minutes of their scheduled appointment time. Walk-in patients report to clinics in two ways: (1) After they have first been seen in the Emergency Room and referred to a clinic, or (2) After they have been interviewed by the Operations Center (Patient registration) and then referred to a clinic. During 1998 and 1999 walk-ins to Emergency Room (ER) were seen by a physician within 10 minutes of their arrival. The desired outcome is that patients will be seen by a physician within 20 minutes of their arrival. Data is not available on walk-in patients who present to the clinic but have not been seen first in ER.

For those walk-ins that are not seen in ER, a time study will be conducted to determine waiting time to be seen by a clinician. The study will examine the delays that would preclude a walk-in patient from being seen by a clinician within 15 minutes of their arrival. Also, walk-ins are instructed to report back to the Operations Center if they were not seen by a clinician within 20 minutes.

Regularly scheduled patients were seen in the seven Primary care Clinics within an average of 15 minutes of their appointment. This data is based on the two most recent waiting time studies conducted in each of the Primary Care clinics. Waiting time studies are conducted usually in the Primary Care Clinics semi-annually.

These studies examine all aspects of waiting time and care time that are part of the Veteran's clinic visit.

Further measures have been incorporated into the fiscal year 2000 Performance Improvement Plan to assure continued timeliness.

(6). Examine the system for awards and recognition to ensure equitability.

VA Handbook 5430.1, dated February 28, 1997, outlines the approved performance appraisal program for the VA. Paragraph 14, states, "Performance awards that are solely based on an employee's rating of record are not authorized in connection with this appraisal program."

VA Handbook 5451, dated August 18, 1998, outlines the approved award recognition system for the VA. Part C, paragraph 1a, states, "General Provisions. Recognition through a cash award, time off award or other honorary or non-monetary means may be granted to an individual employee or group or team of employees in recognition of a contribution, act, service or achievement that benefits VA or beyond, or for overall sustained performance beyond normal job requirements."

Currently, award nominations are submitted by the Service Line Director, through Human Resources (for technical review), to the Medical Center Director for approval. In accordance with Article 15, Section 4, of the Master Agreement between the Department of Veterans Affairs (VA) and American Federation of Government Employees (AFGE), each facility will establish an awards panel consisting of management and bargaining unit employees. The Partnership Council at this medical center submitted a charter and a local awards panel has been established.

In July 1998, this medical center established a Veterans Service Excellence (VSE) recognition system to recognize employees who go out of their way to provide service to veterans seeking health care and related social services. The program is in addition to the Special Contribution, Suggestion, and Employee of the Month/Year, Team of the Quarter and other existing recognition programs. In accordance with Medical Center Memorandum 00–35, the VSE program was thoroughly audited by two employees who have a knowledge of the process but are not involved in the assignment of VSE points. The results of this audit were provided to the Director. Some of the results included reviewing VSE Point Earning Categories to ensure that all "reports of excellence" from patients and/or their families be treated in the same manner; establish a procedure whereby the Canteen will process and redeem certificates in a timely manner, etc. The Employee Satisfaction Team and Partnership Council used the audit results to improve the VSE program.

This medical center is taking the necessary steps to ensure equitability of award recognition.

(7). Assess employee morale to determine why such a large number of randomly selected employees do not believe the medical center is an employer of choice and would not recommend treatment at this facility to a friend or family member.

An all employee survey has been conducted for the purpose of determining what areas can be specifically addressed in relation to making our facility an employer of choice. Subsequently, issues of concern were categorized and prioritized based upon the employee responses to this survey. Results were shared with all employees and workgroups are in various stages of developing and implementing strategies for improvement. Examples are as follows:

—*Job advancement opportunities*.—Selection Panels are now utilized to interview and screen applicants based on the performance based interview process.

—*Job training/proficiency*.—All-employee survey conducted to determine training/educational needs.

—*Improve communication/keeping employees better informed*.—All-employee forums are held every other month. Supervisory forums are held every other month. The employee newsletter was reinstated. The Medical Center Director continues to send all-employee E-mail informational bulletins.

—*Performance/job-recognition improvement*.—Semi-Annual Formal Awards ceremonies established for more timely recognition. Employee newsletter issue dedicated to awards recognition.

—*Improve employee morale and employee behavior/conduct*.—Achieving Excellence in Service (AES) two day customer service training being provided to all employees Electronic employee suggestion program under development Patient Satisfaction and Employee Satisfaction committees combined

A follow-up all employee survey will be conducted in the future to measure the results of our actions.

(8). Take immediate action to ensure cleanliness of the public bathrooms at both divisions.

All public use restroom facilities are now being maintained/cleaned hourly instead of once in the morning and again in the afternoon. In concert with the Associate Director, supervisors in Environmental Management (EMS) have developed a week-

ly basis "inspection checklist" which they use to monitor the cleanliness of their areas. Problem areas are then graphed and tracked/trended, with employees providing input on how to improve the results. The supervisors responsible for sanitation activities at both divisions submit the tracking reports to the EMS Program Manager. The cleanliness of the public use areas, including restrooms has improved and is being maintained at satisfactory levels.

(9). Improve the management of the ambulance service contract by: Establishing local policies that include adequate procedures and controls regarding authorization, certification, and payment of transportation services.

Policies have been created and implemented regarding the ambulance/transportation program. Trip sheets are now required to be provided to the medical center by the contractor. These sheets are used to verify services provided.

Reexamining the number of personnel authorized to order ambulances and determine if the number is appropriate.

A review of staff authorized to order transportation was completed. It was determined that current staff authorized should continue to do so. Additional training has been provided to the staff authorized to do this.

Providing training for all personnel responsible for ordering ambulances to include identifying the proper mode of transportation of the patient.

Training has been conducted with all clerical staff and providers.

Reviewing the ambulance service contract provision with the contractor and ensuring that we pay only the contract rate for transport of veterans.

The contract rate is being applied for all ambulance trips whether ordered by the VA or the patient. This was implemented on July 1, 1999. Upon receipt of the bill, the price is verified. Those that are priced higher are paid at the contract rate. Any invoice that is not charged at the contract rate is extensively reviewed and challenged as appropriate

Ensuring that certification procedures include verifying the rates charged.

The contract rate is being applied for all ambulance trips whether ordered by the VA or the patient. This was implemented on July 1, 1999. Upon receipt of the bill, the price is verified. Those that are priced higher are paid at the contract rate. Any invoice that is not charged at the contract rate is extensively reviewed and challenged as appropriate

Challenging every invoice that is priced higher than the contract rate.

The contract rate is being applied for all ambulance trips whether ordered by the VA or the patient. This was implemented on July 1, 1999. Upon receipt of the bill, the price is verified. Those that are priced higher are paid at the contract rate. Any invoice that is not charged at the contract rate is extensively reviewed and challenged as appropriate

Challenging invoices that do not appear to be proper or may have received prior payment from other sources.

The contract rate is being applied for all ambulance trips whether ordered by the VA or the patient. This was implemented on July 1, 1999. Upon receipt of the bill, the price is verified. Those that are priced higher are paid at the contract rate. Any invoice that is not charged at the contract rate is extensively reviewed and challenged as appropriate.

Proceeding with collection actions if it is verified that duplicate payments have occurred.

Duplicate billings were corrected by Fiscal Program staff. One duplicate payment of $562.50 has been recovered by offset from current payments to the contractor. The other duplicate payment of $9,613.45 will be deducted In May, 2000, from future payments for services rendered.

Establishing better communication and control over patients scheduled to ensure that ambulance arrival is coordinated with the patient's completion of clinic exams or discharge.

A transportation team was appointed to improve the coordination and communication of patient travel. This included working with clinic staff to better coordinate ordering of the transportation. The following were reviewed, and/or implemented:

1. A cost comparison study was performed for contract ambulance versus VA owned ambulance to determine if owning and operating our own ambulance would be more cost effective. A two-month study indicated that owning our ambulance would not result in any cost saving.

2. Psychiatric patients presenting to JC, if stable, are transported to Jefferson Barracks (JB) by ParaLift (Wheelchair) Van with an attendant in lieu of ambulance.

3. We have increased communication and coordination of scheduling appointments and ambulance trips in order to reduce waiting time and resulting increased costs. There will be final review in May, 2000 to determine the outcome of these efforts. During December, we did a specific review of ambulance trips to determine if they

were clinically necessary. This review indicated that 95 percent were clinically necessary and the other 5 percent may be able to be transported by alternate modes if we change specific ER practices before transporting the patient between divisions. The following alternatives are being actively pursued with providers to help make further reductions:

—Whenever possible, provide appropriate psychiatric medications before transfer to the mental health unit in order to stabilize the patient and allow for alternate mode of transportation.

—When appropriate, insert Heplock in patient to remove the necessity for IV treatment during transport.

Based on the issues identified above, review all other contracts and contracting procedures to ensure that effective internal controls are in place and are working.

Thirty-one individuals received Contracting Officer Technical Representatives (COTR) training on June 14, 1999 and June 15, 1999 concerning their duties and responsibilities as a COTR. This training was done at the request of VISN 15 at each of the facilities. This training emphasized to the COTR's their responsibility for ensuring that the work under the contract must be performed in a complete and exact compliance with the requirements of the contract including review of contractors invoices against the contract price and terms.

(10). Establish controls over fee basis payments to ensure: CPT coding is accurate.

Reviews have been made of bills received to assure the accuracy of CPT codes provided. If a CPT code is not listed the bill is returned requesting this information with justification of the amount billed based on that CPT code. Training has been provided to further educate staff on what to look for to improve the accuracy of our reviews.

VA's fee schedule is updated properly and used to limit fees paid.

VA's fee schedule is updated at the beginning of each fiscal year. The recommendation has been implemented and is being used to limit amounts paid.

Verification that service was provided prior to authorizing payment.

Test results and progress notes are being requested with each authorization to verify services were rendered. If the information is not provided, the invoices are not paid and are returned to the vendor as incomplete.

(11). Establish procedures to notify the contract credit card company and cancel the authorized use of purchase credit cards by employees who either transfer to a position not requiring the purchase card or leave VA employment.

Effective September 20, 1999, the contract credit card company was notified to cancel all accounts for employees who either transfer to a position not requiring the purchase card or leave VA employment. We continue to monitor purchase credit cards and employee transfers and separations. The credit card company is being appropriately notified to cancel cards.

(12). Consult with Regional Counsel to determine the next course of action for recovering the balance owed VA in the case identified.

Financial Services forwarded the information in question to Regional Counsel, St. Louis, Missouri, and asked for their advise as to what course of action can be taken for recovering the balance owed the VA in the case identified, "Pre-Trial Diversion Procedures." A re-payment plan was established and signed by the individual in March and we have received two consecutive payments. Further collection options are legally available if there is failure to pay.

(13). Require excess government vehicles be turned in as surplus.

Utilization of leased vehicles was reviewed. Five were determined to be no longer needed. Five vehicles were turned into General Service Administration (GSA) during the time period of June and July 1999 saving the lease cost of $17,400 annually. The vehicles turned in are as follows:

2 G92 series	tractor/trailer
1 G82 series	tractor/trailer
2 G32 series	shuttle buses

(14). Ensure the Muse CV File System is recorded on the CMR and a preventive maintenance schedule is established.

The Muse CV File System was recorded on CMR 20C in June 1999. It is covered by a one-year warranty which expires in the spring of 2000. BMET will review the system requirements and determine if preventive maintenance should be performed by in-house staff or by contract.

(15). Ensure that identified payroll overtime "Exceptions" are reviewed.

The Exceptions Listing is reviewed on a regular basis by payroll, but, it is the responsibility of the timekeeper and supervisor to review this menu option on a regular basis (daily, weekly or bi-weekly), and act on any discrepancies listed. The Exceptions Listing is available under both the supervisors and timekeepers menus. As

part of payroll's semi-annual timekeeper audits, the Exceptions Listing is reviewed by payroll and forwarded to the appropriate timekeeper for action. All discrepancies MUST be resolved by either the timekeeper or the supervisor. The supervisor must then certify the audit and return to it to payroll.

During the recent timekeeper and supervisor training, timekeepers and supervisors were once again reminded to utilize the Exceptions Listing menu option regularly. Currently, the subject Service does not have any prior pay period exceptions.

(16). Require Washington University to ensure that transferred research projects meet the informed consent standards set by VAMC St. Louis.

Transfer of research studies to the St. Louis VA Medical Center from the affiliated universities is rare. Research Service Line has, however, adopted a policy that will require the VA investigator to develop and submit a VA consent for Human Studies Subcommittee review. Upon approval of the consent, the investigator will be required to re-consent all subjects that are continuing in the study. The subjects will be advised of the reason for the change in venue and need for re-consent. Thus, the subject, the investigator, and a disinterested witness will be required to sign the new VA consent form.

(17). Share with other VAMCs the best practice of photocopying patient insurance cards to improve the identification of third party obligors.

This was implemented when the VISN 15 MCCF Accounts Manager reviewed our Category A/MCCF Program. This program was provided to her and she indicated she would encourage other VISN facilities to implement this practice.

There were 28 recommendations covering 17 areas. All of these recommendations have been closed by the OIG with two exceptions (9H and 9I). VA expects that our report to OIG on April 28, 2000 will result in closure of these final two items. At the St. Louis VAMC, we have charged the Director of Quality Management to maintain a tracking mechanism on all recommendations from external review groups, including the Office of Inspector General. This tracking mechanism is maintained until recommendations are resolved and closed. This has been a successful method to assure timely completion.

CAPITAL ASSET REALIGNMENT

Senator BOND. And finally on the capital asset realignment. As I indicated, GAO has raised serious questions—this is the rock we have got to push up the hill. Stakeholders seem to be involved in decision making rather than advisory roles, and the senior leadership in VHA is not involved until too late in the process.

I would like to know here, now, on the record, if these problems can be resolved in the final plan, when the plan will be finalized, and when will VA begin allocating the $10 million we gave you for these studies in fiscal year 2000?

Dr. GARTHWAITE. We will be implementing, and spending the $10 million for the studies this year. We believe that one of the key issues is to have criteria-based evaluation. We've promised draft criteria yesterday in testimony and we'll provide it here as well—within 30 days and, hopefully, then be able to have final draft criteria shortly after that.

I think we are open to many different models and how to govern this in headquarters. I would agree with you, we need stakeholder involvement, but how that is done, it needs to be less as a decision-making, more advisory, and we don't disagree with the GAO at all on that.

Senator BOND. You have got to be directly involved, and we expect to see some movement on it. It's tough, and this is going to be the challenge. And we really expect to see the process underway, because there is so much money we could be devoting to better patient care if we weren't taking care of empty, unneeded buildings.

ADDITIONAL COMMITTEE QUESTIONS

Joe Thompson, it seems that we have been neglecting you, but you should know that you are in our hearts and you are going to be in our questions for the record. As a matter of fact, we have just a lot of interesting things we are going to get into. Unfortunately, I see that we have run out of committee members because of the vote.

[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 CHRISTOPHER S. BOND

ALLOCATION OF FUNDS

Question. There are several areas of your budget where VA is spending far less than what it told us it would spend in 1999 and the current year—even while we increased the overall budget by $1.7 billion. For example:

Post-Traumatic Stress Disorder.—VA spent $87 million in 1999 when it told us last year the estimate was $109 million. It is estimating it will spend $94 million this year, while last year VA estimated it would spend $113.5 million in 2000.

Substance Abuse Treatment.—Last year you told us VA would spend $411 million in 1999, yet the actual 1999 expenditure was $357 million. The 2000 estimate had been $427 million, and currently VA estimates $373 million.

Homeless Compensated Work Therapy Program.—VA now estimates it will spend about half what it had estimated for fiscal year 2000.

How were these budget estimates developed, and why are there such inconsistencies between planned and actual expenditures (please provide specific answers for each of the three examples cited)?

Answer. Budget estimates for 1999 and 2000 in last year's budget for PTSD and Substance Abuse treatment were based on the 1998 actual experience plus inflation. The reasons for the decrease in actual expenditures for PTSD and Substance Abuse Treatment follows:

PTSD.—The decrease reflects the continuing shift in clinical emphasis from inpatient to outpatient care in VA. There was a 22.1 percent decrease in episodes of care for PTSD, and a decline of 15.1 percent in general psychiatry beds used to treat veterans with a primary diagnosis of PTSD in fiscal year 1999 compared to fiscal year 1998. During the same time, specialized outpatient episodes increased 3.1 percent. A recent population-based assessment of PTSD treatment need indicated there are gaps in PTSD care at various places across the system in inpatient and residential care, as well as potential outpatient needs. In recognition of this, the Millennium Act directed increased funding for specialized PTSD (and substance abuse) care programs for fiscal year 2000.

Substance Abuse Treatment.—A combination of closure of inpatient beds and increased use of ambulatory care have resulted in an overall reduction in total program expenditures.

For both of these programs, we believe that the steady outpatient increases will catch up with the initially quick inpatient reductions, providing more stability to the funding level of these programs.

Homeless Compensated Work Therapy Program.—The estimates contained in the fiscal year 2000 budget for this program were built upon a 1998 base that was not an actual at the time of printing. The base estimate turned out to be double the actual. The estimates included in the fiscal year 2001 budget (for 2000 and 2001) were based on a 1999 actual of $4.1 million which reflects the actual allocation of homeless veterans program funds to specific VA medical centers for use in implementing CWT and CWT/TR programs.

Question. How does VHA management ensure national priorities are implemented at the local level?

Answer. One of the primary tools that VHA uses to ensure that national priorities are implemented at the local level is a system of performance measures and monitors. The Chief Network Officer (CNO) holds quarterly conference calls with each of the network directors and their staffs to review the progress made on performance measures in a number of areas. Examples of measures tracked are the Chronic Disease Index, Prevention Index and Clinical Practice Guidelines. National goals are set for each of these measures, and success on these, as well as the other meas-

ures, is an important factor in the end of year performance appraisal for each Network Director. In addition, the CNO monitors many areas that he and other officials in the Office of the Under Secretary of Health have determined need special attention, such as implementation of Alternate Dispute Resolution, the High Performance Development Model, and Patient and Occupational Safety Initiatives. In addition the Headquarters program officials monitor their specific field activities and report findings to the field and the Office of the Under Secretary of Health.

Question. How does VHA management track local expenditures?

Answer. Local expenditures are tracked at each VA facility and input to a national cost system in Austin, Texas. Costs are accumulated to specific clinical activity levels on the Cost Distribution Report (CDR). Costs for each medical center and the Nation are then consolidated with workload information in the VA's National Patient Care Database, and costs are computed for specific patient care activities at the local and national levels. Patient specific cost is also determined in this process.

Question. Where expenditures are inconsistent with plan, what actions are taken?

Answer. At the Veterans Integrated Service Network (VISN) level, Network Directors intervene as necessary to re-focus or re-emphasize facility direction. If expenditures are deemed reasonable for the outcome generated, the plan is modified accordingly. At the national level, the VHA Chief Financial Officer provides information and recommendations to the network and Administration management. As in the case with supplemental funding requests from VISNs, a financially-based site visit to the VISN and respective facilities may be conducted and recommendations provided. Specific program site visits also may be initiated.

Question. How can we be sure that through the VERA allocation system that VA networks and individual hospitals are allocating sufficient funds to these national priorities? Why shouldn't we be funding these national priorities separately from VERA?

Answer. VHA believes that the value of its national programs can best be managed through setting standards and measuring performance, assigning accountability and monitoring spending and revenues rather than centrally controlling all program funding. The performance of national programs are monitored through established VISN measures.

VERA is an effective system for allocating resources to the network level. It was not designed to allocate to facilities or programs. Networks have the flexibility to allocate resources to their facilities using methodologies that they need to meet local needs. However, VHA Headquarters has provided networks with the ten resource allocation principles that they are to use in providing allocations below the network level.

WAITING TIMES

Question. One of your key budget initiatives is "reducing waiting times," for which you estimate spending $400 million in fiscal year 2001, an increase of $200 million over the current year. How can we be assured that these additional resources will go to "reducing waiting times?"

Answer. The resources for this initiative are tied to the service and access budget initiative. As a result, performance measures and monitors also include monitoring waiting times. The Chief Network Officer reviews VISN performance with the Network Directors quarterly. VA is developing software to better measure waiting times and accurately reflect the reporting and progress of this initiative. Through network financial planning, VISNs will identify planned and actual expenditures towards reaching their waiting times performance targets.

Question. Will VISN directors be required to track and report to headquarters the funds spent on meeting the 30–30–20 timeliness goals?

Answer. To ensure accountability for resources attributed to the waiting times reduction initiative, VHA is developing a plan to monitor and track expenditures and evaluate the impact of the resources and activities in reducing waiting times. Six clinics have been identified to monitor the waiting times for specialty care. These will be reflected in the performance goals. This plan will be part of the VISN financial plan submission to VHA headquarters this summer.

Question. Will all of these funds be allocated through VERA, or will you be targeting resources to those facilities which have the worst waiting times?

Answer. The majority of the $400 million will be included in the $18 billion General Purpose funding distributed by VERA. The exception may be the Information Technology dollars spent nationally (e.g., the scheduling package). General Purpose funds constitutes 89 percent of VA's Medical Care appropriation. The combination

of increased funding and specific monitoring of performance toward the goals is expected to address the waiting time issue appropriately at all sites.

Question. VA has acknowledged it has a problem with waiting times. What data did VA use to make that assessment?

Answer. There are several sources that VHA used to make that assessment. The Institute for Healthcare Improvement (IHI) initiative findings and an evaluation of the top diagnoses of the veteran population provided an analysis of potential clinic workload requirements. VHA also analyzed data extracted from the medical centers' scheduling packages. These are the main sources for the initial assessment. Other sources include, patient complaints, historical problems with hiring specialists in some areas, and evaluation of the top diagnoses of our veteran population that indicate potential clinic load.

Question. Did VHA analyze the root causes of its excessive waiting times?

Answer. The Institute for Healthcare Improvement (IHI) initiative on Waits and Delays started their improvement effort by having each facility-based team perform a root cause analysis for the specific clinic they were trying to improve. This is most appropriate since it is not possible to identify two or three root causes for waits and delays at a national or even a VISN level. Root causes are embedded in clinic processes, which vary from clinic to clinic and site to site.

Question. If not, how did VHA identify the initiatives it plans to use to help achieve the 30–30–20 goals?

Answer. As noted in the previous response, root causes were identified. Also, VHA intends to issue planning guidance indicating that for each service and access goal, sites are to identify their current level of performance and performance target for that goal. For each goal they are to identify all planned interventions and the estimated or actual expenditures for each intervention. The list of possible interventions was developed from those identified by IHI and from actions Networks identified as possibilities. VHA believes this approach allows facilities to individualize their approaches, while providing for the national development and monitoring of improvement actions.

Telephone care was chosen as a national initiative based on numerous published articles that indicate access to telephone care increases patient satisfaction, provides quick access to the system and decreases the number of medically unnecessary visits to providers. Providing alternatives to physician/clinician visits should decrease the overall demand for visits. That in turn will make more appointment slots available and help decrease waits. As VHA implements phone care across the system, it expects to develop measures that assess the number of avoided visits and the appropriateness of that avoidance.

Question. What problems exist with VHA's current efforts to collect national waiting time data and how will VA fix these problems?

Answer. The current methodology used to measure clinic appointment waiting times is to measure the time between the date that a next available appointment was requested at a clinic and the date for which the appointment was scheduled to occur. This time actually represents the waiting time experienced by the patient for the appointment. Next available appointment types were selected because their waiting time is dependent on the availability of an opening and is not confounded by patient date and time preferences.

Problems with existing waiting time data is as follows: Waiting times derived from using this next available approach suffer two weaknesses. The first is that if a clinic has zero next available appointments the waiting time cannot be calculated. The possibility of a clinic not having a 'next available' is that the clinician and/or the patient have requested a specific time in all cases. If a specific appointment time is requested it is not placed in the average for next available as there may be numerous slots available before this appointment was made. If the longer, requested time is averaged in it gives a false extended waiting time. The potential for no visits to be 'next available' is small but could happen. In general about 20 percent of scheduled appointments are comprised of next available appointment types. There is however a good deal of variation across clinics. The second problem is the dependence on the scheduling clerk to accurately categorize an event as a next available appointment request. We are working to solve this problem through training. Guidance and education directed at the scheduling clerks on how to respond to the VISTA scheduling prompts has been provided.

VHA's ability to solve these problems is directly related to deficiencies in the VISTA scheduling software. This software was built in the 1970's and needs to be replaced. Deficiencies in the scheduling software are listed below:

(1) Inability to distinguish between new and follow-up appointments and the inability to distinguish between urgent and routine appointments.

(2) Inability to document the patient's or provider's desired date of the future appointment.

(3) Inability to specify a particular appointment duration when searching for future availability.

(4) Inability to calculate the total time interval between request and appointment when the appointment has been rescheduled one or more times.

(5) Inconsistent use of the scheduling system within and across facilities due to locally developed "work-arounds" devised in response to deficiencies in the scheduling software.

The current software does not support local business needs and is viewed as an obstacle rather than an asset. Tasks such as managing rotating house-staff (with concomitant changing and unpredictable staffing levels, difficulties in achieving continuity of care and requirements to transfer appointments from one provider to another), scheduling visits far into the future, scheduling across facilities, viewing a patient's appointment schedule from a VISN perspective and linking appointments together (such as laboratory or radiology visits preceding a provider encounter) are only marginally supported by the current Scheduling System. It is believed that a major overhaul of the Scheduling System is required in order to facilitate these types of activities.

The VA is considering another software patch that will collect waiting times for all appointment types by recording the date the appointment is desired and the date the appointment is scheduled for. This will produce waiting times that have some elements of patient preference built into them and will be able to collect waiting times for all patients. This patch will help produce a more complete view of waiting times but does not substitute the need to rebuild the existing software.

Question. What types of ongoing data reliability problems might persist?

Answer. Waiting times are a new measure. As with all new measures, data reliability is an issue during the first few early runs. As concerns arise, they are solved (e.g. the first pilot run of the measure indicated a problem with the clinic numbers that designate a primary care clinic). The issue was addressed and resolved. There will be ongoing evaluations to identify future issues.

Question. What is VHA's basis for selecting the six clinics—audiology, cardiology, opthalmology, orthopedics, primary care, and urology—that will be measured?

Answer. Initial entry into the VHA is through the Primary Care provider or clinic, therefore Primary Care clinics were chosen. The other clinic choices resulted from historical qualitative information about diagnoses that lead to high clinic loads and historical problems with hiring specialists.

Question. How will VHA ensure that improved timeliness for the six clinics is not achieved at the expense of other clinics?

Answer. Each quarter the Performance Measurement Workgroup reviews the findings of all measures. The waiting times reviews will include not only those selected, but all clinics. This evaluation will be used to determine the performance measure for upcoming years. This baseline clinic information will be used to track progress and to determine if any other clinic waiting times are increasing. Selected clinics for subsequent years will change according to the findings of these reviews.

RESERVE

Question. Each year VA has a national reserve for "emergencies." What is the process for allocating the reserve?

Answer. The reserve is used as a source of funding for new activities or to supplement existing activities during the year. VHA's Screening and Evaluation Committee releases funds from the reserve after review, recommendations by the Policy Board, and approval by the Deputy Under Secretary for Health. If there is a current year funding balance at or shortly after mid-year that is not expected to be needed for other emergencies, it is distributed to the networks using the VERA methodology.

Question. How much is left in fiscal year 2000 reserve funds?

Answer. The current balance in the reserve, originally $150 million, is now $42.7 million.

Question. Have any networks requested additional Hepatitis C funds?

Answer. VA has not had any requests from networks for additional Hepatitis C funding. However, Network 3 requested supplemental funding for fiscal year 2000 and included Hepatitis C workload as part of its justification. Its total request was $102 million and $66.2 million was approved.

TWO-YEAR FUNDS

Question. Last year the Committee agreed to the administration's proposal to make available for 2 years about 5 percent ($900 million) of the medical care appropriation. How much do you anticipate you will carryover, and can you give me assurances these funds aren't being inappropriately squirreled away when needs exist now?

Answer. VA still embraces the concept of 5 percent of appropriation as no-year funding to provide maximum beneficial use for veterans health care of all funds Congress provides. Last year Congress set the level as an absolute amount at $900 million. That level was close to the 5 percent amount of the 2000 appropriation level. The $900 million level provides sufficient flexibility for fiscal year 2001 and we will adjust it in the fiscal year 2002 budget request.

VHA has no intent to withhold dollars inappropriately or otherwise to compromise the intent of Congress. Two-year availability provides flexibility to management in those cases where funding priorities need to be addressed.

HEPATITIS C

Question. A year ago, we were told that VA spending for hepatitis C might need to be $500 million or more in fiscal year 2000. At that time, there was question as to the prevalency rate in the veteran population, as well as uncertainty about what percent of patients afflicted with Hepatitis C might be well-suited for the new combination treatment. Does VA have a better handle on the prevalency rate in the VA population?

Answer. The prevalence rate from the one day Surveillance sample of March 17, 1999, was 6.6 percent. Two ongoing clinical trials (one funded by VHA and one by industry) should provide more precise data within the next several months.

Question. How many patients are currently receiving the new combination therapy, and what is your current estimate of the number of enrolled veterans who would benefit from treatment?

Answer. According to current information approximately 1,200 patients are receiving combination therapy for hepatitis C. The medication was not approved by the FDA until December 1998 and was placed on the VA formulary in February 1999. Currently only 20 percent of our HCV positive patients are believed to be clinically appropriate for combination therapy. This is based on both expert opinions by VA hepatologists and early evidence from an ongoing clinical trial where appropriateness for treatment in clinical study patients ranges from 0 percent to 40 percent. Many patients do not have evidence of cirrhosis on liver biopsy and, therefore, are not presently believed to require treatment with interferon and ribavirin. Other patients have cirrhosis that is too severe to be improved by treatment. All patients who are not presently being placed on combination therapy are still followed for any change in their clinical status which might make them eligible for treatment at another point in time. Also, some patients refuse treatment after they are informed of the risk and benefits, and many drop out due to side effects.

Question. According to the budget, VA estimates it will spend $195 million in fiscal year 2000 on Hepatitis C, while the original budget estimate had been $250 million. Yet for the first quarter of this year, VA hospitals have reported that they have spent only $9 million. Whether the field is not coding information properly, or if in fact they're only spending $9 million, in either case this points to a huge problem. These numbers give us no confidence in the estimates we see in the budget justification. Can you explain the numbers? Why is spending so much less than the $500 million we anticipated last year?

Answer. Last year's (fiscal year 2000) and this year's (fiscal year 2001) budget estimated the following costs for Hepatitis C:

HEPATITIS C COST ESTIMATES

[In millions of dollars]

Budget	Fiscal years—		
	1999	2000	2001
Fiscal year 2000 President's Budget	114	250	.....
Fiscal year 2001 President's Budget	46	195	340

Fiscal Year 2000 and Fiscal Year 2001 Budget Estimates.—Although the Hepatitis C funding model was used in formulating estimates for both fiscal year 2000 and

fiscal year 2001 budgets, the cost estimate differences between the two budgets can best be summarized as follows:

The fiscal year 2000 budget model assumed more patients would be evaluated and treated in fiscal year 1999 and fiscal year 2000 than that predicted in the fiscal year 2001 budget for the same years. VA believes that the surge of patient workload is likely to occur in the fiscal year 2001 due to the increasing veteran awareness, education and training of staff and to VA's promotional efforts to identify patients of high risk for this disease.

It is important to note that the unit cost assumptions in the fiscal year 2001 budget are higher. However, the overall total cost estimates are lower than that estimated last year due to a more conservative assessment of screening and patient workload for fiscal year 2000.

Actual Costs Compared to Estimates.—The original estimates for Hepatitis C were based on a model developed in VA that included cost and workload assumptions on screenings, tests, and treatments. With the availability of hard data (actual costs), a transition will be made from modeled baseline costs to actual baseline costs. At this time, some actual information is available for fiscal year 2000, although somewhat limited. Using available information we have estimated costs for screenings, tests for patients testing negative, clinic and counseling staff for patients testing positive, and education costs not available in actual cost reporting. Projecting actual and estimated costs for the full year results in a current Hepatitis C estimate of just under $100 million for fiscal year 2000. In addition, VA will spend approximately $1.8 million to support the two Centers for Excellence for Hepatitis C and national training efforts in fiscal year 2000. We are taking steps to capture more complete information on treatment of patients who are HCV positive and to improve our cost accounting for these patients. An automated Hepatitis C registry with a clinical reminder patch is currently being tested and is expected to be fully operational later this summer. This updated system will permit VA to better track its Hepatitis C efforts and their associated costs. Also, we are reviewing our program and its funding to ensure that our facilities and providers have the proper incentives to aggressively pursue the goals of this program.

Question. Recognizing that Hepatitis C treatment is very expensive, and given VHA has apparently limited both the scope of its outreach efforts and the pace of screenings, can it be concluded that VHA's hepatitis C spending plan is more budget-driven than needs based?

Answer. The scope of outreach efforts has not been limited and the pace of screening has significantly increased in a number of Networks. Recently the local chapters of the Vietnam Veterans of American held screening efforts in several cities in conjunction with Miss America, an effort sponsored by Schering-Plough. The turnout was disappointingly low, but VA Medical Centers across the country provided support to these efforts. On March 31 and April 1, the American Liver Foundation also held screening efforts in five cities in cooperation with the national offices of the major Veteran Service Organizations (VSOs). Again, the turnout was lower than expected, but the efforts continue.

The Chief Consultant, Acute Care Strategic Healthcare Group also made a presentation to the Hepatitis Foundation International regarding VA's efforts. This organization's membership is largely individuals who have either Hepatitis B or C, and this organization has already been helpful in providing educational materials for patients.

A presentation about Hepatitis C and liver transplantation was held May 4, 5, and 6 on the Mall for Public Service Awareness Week. At the booth VA provided patient information and answered questions from the public. Outreach efforts are also a part of each network plan. It is VA's intention that every patient is asked about his/her risk factors for HCV, and tested if appropriate or if the patient requests a test. VA has developed a clinical reminder system that is currently in beta testing. The purpose of this system is remind clinicians to screen all veteran patients for HCV risk factors. Full implementation of this system is expected in the near future and should ensure that 100 percent of enrolled veterans are screened for risk factors.

Based on their risk factors, veterans are then referred for HCV testing. The pace of such screening, testing and treatment is dependent on having in place the appropriate education, infrastructure, and resources. Appropriate clinical staff are being recruited and educated to meet these needs. Programs of this magnitude require time to develop, implement, and subsequently evaluate.

The Acute Care Strategic Health Care Group program office has worked with the Centers of Excellence to support the networks' effort with the appropriate provider education materials and presentations, and counseling materials and educational sessions. This office has assisted in outreach through public relations; published ar-

ticles in both the lay press and professional journals; and provided network management with feedback from the HCV Registry in order to assist them in assessing their needs.

Question. I understand that last year, VA spent $657,000 on six projects directly related to Hepatitis C, and expects to spend $1.2 million this year. Is this enough, to really get a better handle on this disease and treatments?

Answer. In fiscal year 1999 the VA expended $5,549,009 on 34 projects related to liver disease; $2,639,091 was expended on 24 projects related to Hepatitis; and $657,031 on six investigator-initiated projects directly related to Hepatitis C. This was an increase for Hepatitis C from fiscal year 1998, when $298,433 was expended on three projects, and reflects the increased interest in Hepatitis C as an emerging pathogen. Starting July 2000, we anticipate funding a Cooperative Study, entitled "Epidemiologic Multi-Site Hepatitis C Virus (HCV) Study." This will cost approximately $500,000 in fiscal year 2000, raising the total VA Research expenditure this fiscal year to $1.3 million. In fiscal year 2001, the Cooperative Study will be fully funded for $1 million. This will result in an estimated expenditure in fiscal year 2001 of $1.9 million on Hepatitis C research provided the VA Research budget remains level. This represents an almost 300 percent increase in spending on Hepatitis C research from fiscal year 1998 to our projection for fiscal year 2001. At present, $1.3 million is adequate as it represents what VHA can appropriately spend on scientifically meritorious proposals dealing with Hepatitis C. As time goes on, we anticipate more meritorious proposals on the topic, and we will endeavor to fund them as they are approved. Presently, the number of meritorious proposals, not the amount of money, is the limiting factor.

MANAGEMENT EFFICIENCIES

Question. Last year, General Accounting Office (GAO) indicated that approximately $600 million of the "management efficiencies" that VA's 22 networks identified as potential cost-savings measures for fiscal year 2000, could be undertaken without jeopardizing patient care. How much of the $600 million in initiatives identified by GAO and VA are being implemented with funds redirected to health care?

Answer. VHA is in the process of implementing approximately $348 million in cost savings measures.

Question. How much is left to make VA health care truly cost-effective?

Answer. Achieving cost effectiveness is not a one-time effort. It is an on-going process. There will always be elements within VHA, as with any public or private business, that can operationally improve. VHA's task is to continue to monitor and assess its operations to: identify areas where efficiencies can be implemented; to utilize the skills of its work force to identify areas available for improvement; participate with the private sector to determine best management practices; and, be forward thinking and willing to improve management practices and provide more appropriate health care. Significant progress has been made by VHA in the last few years and more is expected. Since fiscal year 1996, VHA has reduced cost per unique patient by 8.25 percent (18.25 percent in constant dollars) through management efficiencies.

Question. Have "best practices" been standardized throughout the system?

For example, the IG recently reported that centralizing food productions within a network is a best practice that should be adopted by all networks if feasible.

Another example, the IG did a recent report on management of prosthetic supply inventories, and found better management could lead to $31 million in savings.

Answer. Best practices are commonly applied throughout VHA. Examples include: clinical guidelines implementation, health promotion/disease prevention, management of chronic disease, patient safety initiatives, management and care of Human Immunodeficiency Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS) patients, homeless—care and psycho-social intervention, IHI collaborative on waits and delays, and care and treatment of PTSD. Another example is the standardization of pharmaceuticals which has resulted in cost savings of approximately $650 million. Now, VHA is implementing standardization of Medical/Surgical supplies.

ENROLLMENT

Question. VA is in the second year of open enrollment. What has been VA's experience to date—has it met or exceeded expectations in terms of the numbers of veterans who have signed up for care?

Answer. VA is experiencing a slight increase in enrollees from fiscal year 1999 to fiscal year 2000. This would bring us to approximately 4.3 million veterans—2.8 percent more than fiscal year 1999. This is consistent with our expectations.

Question. What percentage of veterans who enroll are actually using VA for health care?

Fiscal year	Patient users	Total enrollees	Percentage
Fiscal year 1999	3,177,216	4,520,012	70.3
Fiscal year 2000 [1]	2,849,189	4,411,859	64.6

[1] Fiscal year 2000 data is through March 2000. Additionally, the total enrollee definition was modified from fiscal year 1999 to fiscal year 2000.

Question. How many people are enrolling and using VA primarily to "fill in the gaps"—say for inexpensive prescriptions and eyeglasses?

Answer. VA can give an estimate of those types of people by identifying the "non-vested" (those not receiving a full range of services) priority 7 patients in VERA. Of the approximately 85,000 non-vested priority 7 veterans, 687 used prosthetic services (which includes eyeglasses) and 18,000 received pharmacy services.

HOMELESS

Question. How does VA evaluate the effectiveness of its various homeless initiatives?

Answer. VA's Northeast Program Evaluation Center (NEPEC) has been monitoring and evaluating VA's homeless veterans programs since the programs began in 1987. The program monitoring and evaluation system uses structure, process and outcome measures to evaluate the effectiveness of the homeless veterans programs. Clinicians assigned to the homeless veterans programs across the country complete intake forms when homeless veterans are first enrolled in the program and complete discharge summary forms when veterans are discharged from the program. The data gathered on each homeless veteran at admission and discharge is analyzed and used for program evaluation.

Outcome measures that are used to evaluate the therapeutic effectiveness of the programs include:

—percentage of homeless veterans who are housed at the time of discharge;

—percentage of homeless veterans who are employed at discharge; and

—clinical improvement for mental health and substance abuse problems.

In addition to the ongoing monitoring of the homeless veterans programs described above, NEPEC conducted an observational outcome study of the initial Homeless Chronically Mentally Ill (HCMI) Veterans Programs at nine pilot sites to assess the long-term effectiveness of the services offered by these programs. A total of 406 veterans completed follow up interviews and the average number of months from time of admission to final follow-up interview was eight months. Significant findings from this observational outcome study were as follows:

Greater numbers of contacts between homeless veterans and the clinical staff of the HCMI Veterans Program was significantly associated with greater improvement in four outcome measures: (1) veterans had less psychological distress; (2) veterans had reduced severity of alcohol problems; (3) veterans had fewer days of substance used; and, (4) veterans spent fewer days homeless.

The longer duration of homeless veterans' involvement in the HCMI Veterans Program was related to improvement in the number of days housed from the time of discharge to the time of the follow-up interview.

The greater number of days in community-based residential care was associated with greater improvement in: (1) number of days housed from the time of discharge to follow-up; (2) number of days employed from time of discharge to follow-up; and, (3) size of social network at follow-up.

Although this observational outcome study was conducted several years ago, the structure of VA's core-homeless veterans programs (i.e., outreach, treatment, case management, and contract residential care in community-based programs) remains essentially the same. The results of this study are applicable to VA's programs as they exist today.

VA continues to monitor the outcome of residential treatment through clinician discharge summaries. In addition, at General Accounting Office's request, we are starting a new series of outcome studies.

NEPEC is also completing data collection and analysis of a five-year, long-term follow-up study of homeless veterans who received standard care in the HCMI Veterans Program and homeless veterans who received services in the Housing and Urban Development—VA Supported Housing (HUD–VASH) Program. The HUD–VASH program provides permanent housing to homeless veterans through dedicated

Section 8 housing vouchers made available by HUD, and VA clinicians provide ongoing case management services to help these homeless veterans find permanent housing and remain in it. While the HUD–VASH demonstration program exists at 35 locations, four pilot sites were selected to participate in a rigorous experimental design approach. Homeless veterans at these four pilot sites were randomly assigned to: (1) Section 8 Vouchers plus Case Management; (2) Case Management Only; or (3) HCMI Veterans Program Treatment (which includes relatively short-term transitional residential care in community-based facilities that are under VA contract).

The purpose of the HCMI Veterans Program/HUD–VASH Program long-term outcome study is to compare the effectiveness of three types of services that are being provided to homeless veterans. In this study, care provided in the HCMI Veterans Program is considered to be standard care while case management only and case management plus vouchers are considered to be new models of treatment.

Outcome measures for the HCMI Veterans Program/HUD–VASH Program Study include housing stability, clinical status and employment status. Veterans who were assigned to these three models of care have been followed for several years and have been interviewed on a quarterly basis. Results of this study will provide important information on the types of services that are most effective in helping homeless veterans achieve housing stability, clinical improvements, and meaningful employment. This study was started five years ago and was designed to address questions concerning long-term effectiveness of VA's homeless veterans programs. Results of this study will be available in 2001.

Question. How does VA ensure each VA hospital has effective programs, particularly in those geographic areas where a large homeless population exists?

Answer. All VA medical centers with specialized homeless veterans programs comply with NEPEC's evaluation procedures. Information about workload for each homeless veterans program is compiled and sent to each program coordinator and VA medical center director. NEPEC uses 32 key measures to assess therapeutic and cost effectiveness. Any program that fails one standard deviation from the national average in a negative direction on a given measure is identified as an outlier. Program coordinators and VAMC Directors have an opportunity to compare their programs with others and modify program operations if necessary. Programs are asked to address the causes of outlier status and identify plans for remedial action. These changes are reviewed in the subsequent year's report.

Question. Does VA track staffing and funding levels in each medical center dedicated to homeless services? If not, why not?

Answer. Yes. Tracking staffing and funding levels is part of the NEPEC evaluation system.

Question. The CHALENG legislation (Public Law 102–405) required VA to assess and coordinate the needs of homeless veterans living within the area served by the medical center or regional office. What progress has VA made in implementing that legislation?

Answer. VA has been coordinating Project CHALENG (Community Homelessness Assessment, Local Education and Networking Groups) for the past five years. Each VA medical center has appointed a CHALENG Point of Contact to work with representatives from other federal agencies, state and local governments and nonprofit organizations to identify the needs of homeless veterans and to develop action plans to meet those needs. The CHALENG process usually involves one or more meetings per year and gives both VA and non-VA staff an opportunity to discuss homeless veterans issues. In 1999, 2,651 people participated in CHALENG activities across the country. Of the total participants, 15 percent were VA staff and 85 percent were community participants. Approximately 8 percent of the participants were homeless or formerly homeless veterans. As in past years, the need for transitional housing, permanent housing, transportation, day treatment programs, eye care, dental care, childcare, legal assistance and guardianship were identified as some of the greatest needs of homeless veterans. VA staff has also identified plans that have been jointly developed by VA and community partners to address these unmet needs.

Question. Are all medical centers implementing the law fully?

Answer. In 1999, 92 percent of all VA medical centers participated in Project CHALENG with 8 percent failing to comply with the legislation. Those sites have been contacted and we expect 100 percent compliance next year.

COMMUNITY BASED OUTPATIENT CLINICS (CBOCS)

Question. VA's goal is to have a total of 659 community-based outpatient clinics by 2003; VA estimates it will reach that goal in fiscal year 2001. What is the basis for that number?

Answer. CBOCs are defined as all outpatient clinics except; hospital based, mobile, and independent clinics. The 659 was a combination of clinics existing prior to the 1995 legislation, opened between 1995 and 1997 as reported in the 1998 VA Accountability Report, and projected 1998–2002 by the networks in their 1998–2002 strategic plans. Each network, as part of the strategic planning process, evaluates veteran needs and service delivery options which will result in a full continuum of care. Access to outpatient services is an integral part of providing a full continuum of care and CBOCs are identified in the Strategic Plan. When meeting veterans' need for services is hampered by access, Networks plan new CBOCs.

Question. With 659 CBOCs, will there be adequate access, and equity of access, throughout the VA system?

Answer. Equity of access is relative and definitional. VHA strives to assure that all veterans who use VA have access to all needed service as close to their home as possible. There are challenges in doing this. More CBOCs continue to be proposed and established which will increase convenience of access. At this time, 80 to 85 percent of veterans have access to care within 30 minutes or 30 miles of their homes.

Question. How many total new users have come to the VA in the last 4 years through CBOCs?

Answer. Using the definition of a new user as someone who has not received VA health care services during the previous three fiscal years, during the time period of fiscal year 1996 to fiscal year 1999, there were 374,127 new users who came to VA through CBOCs. This data only captures those new patients who had their first encounter at a CBOC versus at a parent facility.

Fiscal year	*Number of new users first seen in CBOC*
1996	72,452
1997	70,222
1998	95,720
1999	135,733

Question. Are the CBOCs actually providing care more cost-effectively? If yes, on what basis can you claim this?

Answer. A CBOC Performance Evaluation study is being conducted and should be completed by early summer. This study will include information on cost effectiveness. Preliminary indications, based on a sample, indicate that primary care costs may be higher but are offset by lower specialty and inpatient costs resulting from early intervention.

Question. What is the total fiscal year 2000 and fiscal year 2001 cost of the CBOCs?

Answer. In order to obtain accurate current and projected costs, a field survey has been conducted and the information is being compiled and should be available by the end of summer.

BUYOUTS

Question. VA estimates it will buyout 4,400 VHA employees in fiscal year 2000–2001. What is the basis for predicting the number of employees who would accept buyouts?

Answer. VHA was provided authority to use up to 4,400 buyouts in fiscal year 2000 and the first quarter of fiscal year 2001 through the Veterans Millennium Health Care and Benefits Act, Title XI—Voluntary Separation Incentive Program. As VHA committed in discussions with Congressional staff, the positions eliminated as a result of these buyouts are no longer needed as the result of improvements in healthcare services delivery or through efficiencies gained through organizational restructuring and business process re-engineering. In their place, new or restructured positions will focus on direct health care delivery, quality and safety improvement and improving access to care.

VHA's estimates of potential buyouts were based on the Buyout Operational Planning process we completed in December 1999 to obtain Office of Management and Budget (OMB) approval to implement our Buyout program. Through this process, all VHA facilities were surveyed and asked to estimate the number of potential buyouts they may expect based on their individual organizational plans. Based on this Buyout Operational Plan, we anticipate that we will use from 3,000 up to the 4,400 maximum buyouts allowed by December 31, 2000. We expect that the majority of these buyouts will come from administrative and clinical positions impacted by reduced inpatient care programs and from organizational and business process efficiencies.

As noted above, VHA will use the resources freed through this effort to add new or restructured positions to support achievement of VA's goals to improve quality

and access to care (predominately through expansion of our outpatient healthcare programs) and to expand our patient safety program. VHA will establish and fill these new positions as specific needs are identified and as associated program and organizational plans are implemented. Based on trends in earlier Buyout programs and on employee retirement patterns in general, we expect that large numbers of buyouts will occur around fiscal and calendar year boundaries. On the other hand, new positions will be continually established as buyout savings accrue and program and organizational plans are implemented throughout the fiscal year.

Question. For the projected level of accepted buyouts, how many FTE can be realized in fiscal year 2000-fiscal year 2001?

Answer. While it is difficult to predict with any great degree of accuracy this early in the Buyout program, we anticipate that the number of new positions established in fiscal year 2000 and fiscal year 2001 will approximate the number of buyouts given in each of these fiscal years. VHA has implemented a monthly reporting process to ensure effective monitoring of our Buyout program and we are actively managing the program to ensure that we fully comply with the intent of the law, especially to not use buyouts to reduce full time equivalent employment in VHA.

COLLECTIONS

Question. What progress has been made in improving VA's collections of third-party payments?

Answer. Billing third party carriers using Reasonable Charges is vastly different from previous billing and includes a significant increase in the type, amount, and complexity of information required to prepare the claims for each episode of care, higher standards for the accuracy and completeness of clinical data and documentation required to support each claim, and the procedures needed to post reimbursement to first party copayment and third party accounts. Since the implementation of Reasonable Charges on September 1, 1999, networks have provided staff training to address issues of documentation, coding, and compliance. They are entering into agreements with carriers for payments. A Reasonable Charges workgroup has been formed to address the operational issues that the field encounters as we continue billing under Reasonable Charges. Third party receivables have gone from a low $63 million in October to a high of $185 million in March. First-party collections appear to be following this trend as well.

Question. Are you satisfied with the progress that has been made in the last year, and why does VA continue to fall short of its goals?

Answer. The field is going through a massive training effort and the results are just now beginning to be seen in increases in receivables and collections. We are satisfied that progress is being made and are encouraged by the fact that revenue exceeded prior collections for the month of March. Collections reached $55.5 million in March, our highest collection month ever.

Question. What is the status of VA's compliance with HCFA requirements for billing and coding?

Answer. VHA has taken a position that we will strive to meet HCFA requirements. Due to the complexity of the issue and the impact that compliance with HCFA standards may have on medical center operations, VHA has decided to conduct an Impact Analysis of meeting HCFA standards. An independent consultant that understands VHA policies and HCFA requirements will conduct the Impact Analysis. A contract was awarded in May and we expect to have the analysis completed within 60 to 90 days. VA expects the contractor to conduct a comprehensive analysis of the circumstances and issues surrounding VHA's ability to meet Medicare/HCFA standards specifically as it relates to resident billing and supervision. The recommendations and findings from the study are expected to provide a more clear understanding of the impact on VHA operations and quantification relative to resources and effect on revenue in meeting HCFA standards.

Question. The Independent Budget has as one of their key recommendations, that VA should have authority to contract out its medical care collections. Do you agree?

Answer. VA currently is in the process of developing a pilot test to determine the most feasible way to do medical care collections, either by internal franchise or by contracting out. VA agrees that it should have the flexibility to contract out, if it proves to be more effective than in-house collections.

Question. Is VA confident it will collect the $958 million estimated in the budget for fiscal year 2001?

Answer. Collection of $958 million is dependent on VHA making timely policy decisions on how to implement various provisions of the Millennium Health Care Bill, capturing those decisions into regulations, issuing draft regulations, receiving comments, and issuing final regulations. Implementation of the Millennium Health

Care bill will require major software changes to the Veterans Health Information Systems and Technology (VISTA) system as well as an extensive educational effort. Reaching $958 million will also depend on VA and Department of Defense agreeing on how to implement the "Priority 7 retiree" provisions, and implementing those provisions nationwide. If those two processes are completed early in fiscal year 2001, VA believes the $958 million estimates are obtainable.

Question. If not, what are the consequences, particularly in view of VA's proposal to return to Treasury 50 percent of the first $700 million in collections?

Answer. VHA has projected that returning $350 million of the $958 million in collections to Treasury is possible without negatively impacting patient care since the President's Budget includes an additional $350 million in its estimate to offset new costs imposed by the Millennium Bill.

COMPUTER SECURITY

Question. According to the Secretary's opening statement, VA is working to improve its information security program. Have there been incidences of hackers intruding into VA systems? Please explain. How much is included in the budget to implement VA's computer security improvements which are described in today's testimony?

Answer. VA has experienced one known outside attack. An outside party attacked VA's public website on October 25, 1999. The website's content was defaced with a hacker's signature message but was restored to its normal appearance in a few hours. VA operates numerous connections to the Internet. Tests conducted by VA indicate some of these connections are vulnerable to attack. Further, some of these connections are not adequately monitored to recognize attempted or successful intrusions. VA's national information security plan calls for a strategic investment of $83.3 million over the six-year period fiscal year 2000 through fiscal year 2005 to address the Internet attack vulnerability, as well as other kinds of information security weaknesses. The annual cost for fiscal years 2000 to 2002 will average $16 to $17 million. Beyond fiscal year 2002, the program will level to about $10 million per year. The national plan was approved by the Capital Investment Board, and is included in VA's fiscal year 2001 submission as a budget neutral item. VA will face difficulties constituting a national security fund from multiple appropriations because formal management mechanisms to do so are unavailable.

MILITARY RETIREES

Question. According to VA's budget, VA anticipates receiving $182 million in DOD reimbursements. What is the status of VA's negotiations with DOD?

Answer. The two Departments and the Office of Management and Budget (OMB) are working together to resolve some implementation issues in preparation for the development of the memorandum of understanding (MOU) that is required by the statute. We remain hopeful that we will be able to meet the date of August 31 for completion of a MOU.

Question. Are you confident a MOU will be in place prior to the start of the fiscal year?

Answer. Although there are some difficult legal issues (reimbursement issues, current status of TRICARE and users of Military Medical Treatment facilities) to address, all parties concerned are seeking to have a MOU in place by the deadline.

Question. What is the basis for $182 million in reimbursements, and how many military retirees do you anticipate serving in fiscal year 2001?

Answer. DOD and VA jointly developed the $182 million estimate that VA would receive from DOD for providing services to DOD beneficiaries. This is a "best guess" estimate since neither VA or DOD have the appropriate statistics on the number of military retirees who currently use or will now use VA health services due to the provision.

Question. What is the current number of military retirees using VA medical care services?

Answer. Although we do not have this information currently, VA is in the process of matching patient records against the Defense Eligibility and Enrollment System and should have better data this summer.

LONG-TERM CARE

Question. VA's budget includes $548 million to fulfill the requirements of the Millennium Act, an increase of $350 million over the current year. According to the veterans service organizations, an increase of $459 million is needed for the new long-term care initiatives and $270 million is needed to cover the costs of expanded emer-

gency care. Have you looked at the VSO's analysis? Why is there such a large discrepancy between your estimates and theirs?

Answer. VA has not had the opportunity to review the methodology supporting the veterans service organizations' cost estimates of Public Law 106–117. VA is seeking that information and will provide a final response to this question once complete.

Question. Are you confident sufficient funds have been included?

Answer. VA is confidant that funds available in fiscal year 2000 and proposed in fiscal year 2001 are sufficient to meet the implementation costs of Public Law 106–117.

CAPITAL ASSET REALIGNMENT

Question. Capital asset realignment is the most important next-step for VA to ensure it expends its medical care dollars effectively for health care. Only about 25 percent of facilities currently are used for direct-care. And GAO estimated last year VA is wasting about $1 million a year on unneeded infrastructure. GAO recommends that VA's Capital Investment Board—which manages the process of prioritizing construction projects—be given responsibility for capital asset realignment. Do you agree? Please explain how VA will be addressing the concerns and recommendations in GAO's testimony of today.

Answer. GAO concluded that VHA is spending 25 percent of the medical care appropriation on operating, maintaining, and improving buildings and land nationwide. Based upon the fiscal year 2000 proposed medical care appropriation these costs would be approximately $4 billion. These expenditures are based on activities that GAO includes in asset ownership, such as administration, engineering, environmental, security, textile services, food services and capital investment. These expenditures represent the total costs of asset ownership and not the potential savings. GAO estimated that $365 million of the $4 billion could potentially be saved if VA stopped operating and maintaining unneeded buildings. GAO based their savings estimate on their finding that $20 million could be saved if VA closed one of the four VA hospitals in the Chicago area. GAO then assumed that approximately 18 locations of VA's 40 multi-facility markets could be removed from service at savings (generalized from the Chicago estimate) of $20 million each. The GAO estimate of $365 million or $1 million a day would be a result of these locations being removed from service. According to GAO, approximately 50 percent of the savings consists of reductions in personal services and 50 percent would be for all other costs. GAO is in agreement with VA that $365 million represents a portion of the $4 billion asset ownership costs that could be potentially saved by realigning VA's capital assets.

We do not agree with GAO's recommendation that the VACIB be given operational responsibility for capital asset realignment. The VA Capital Investment Board has accomplished much over the past three years in the development of the Capital Investment Methodology and in improving the Department's capital investment decision making. VHA needs to take advantage of this experience and the lessons learned by the Department VACIB. There are many reasons that the responsibility for capital realignment should reside in VHA. The primary reason is Capital Assert Realignment for Enhanced Services (CARES) must respond to patient needs and services and the enhancement of those needs and services to veterans. VHA is clearly the best organization to focus the initiative on appropriate patient and clinical issues.

VHA agrees with GAO, in the need to develop objective and measurable criteria that can be used to evaluate the service delivery options and the associated capital realignment proposals that will result from the (CARES) process. VHA is currently developing criteria in conjunction with Department offices, and GAO staff, that will result in a decision model that will be similar to that used by the VACIB to evaluate major capital investments but will focus on patient outcomes such as quality and access to services in addition to resource utilization and cost.

As stated at the hearing, VHA will provide a report to the subcommittee within 30 days that will identify the broad evaluation criteria that have been agreed to and will outline the process to involve stakeholders in the development of criteria weights, specific identification of quantifiable sub-criteria, identification and linkage of specific data to each of the sub-criteria, development of rating scales for evaluating the proposed options and incorporation of all of this into a methodology that will be used to evaluate CARES study recommendations. In addition, the final report and completed methodology, including specific criteria and sub-criteria with relative weights and the rating scales will be provided in 60 days.

VA recognizes the need to raise the importance of asset management at both the Department and Administrative (VHA, VBA, and NCA) levels. The Department and Administrations including VHA also need to have staff dedicated to the improvement of the management of capital assets.

Currently, VA does not have a comprehensive asset management program. In order to meet this need, VA proposed the establishment of a Department level office for Capital Asset Management in the fiscal year 2001 Budget Submission. This office would provide corporate policy and direction to other aspects of asset management including, but not limited to, asset utilization and disposal. The functions of a capital asset management program would include policy development, planning, investment strategies, portfolio management, performance measurement, and administration. Also, as with the implementation of the VHA Capital CARES studies, this office would work to ensure a Department-wide perspective on capital investment decisions made, with respect to the needs of VBA, NCA, and staff offices.

Question. What is the status of the Chicago realignment, and when will a final decision be made?

Answer. The VISN 12 Delivery System Options Study was commissioned by Dr. Kenneth W. Kizer, former Under Secretary for Health, in response to a GAO report that recommended the closure of a VA hospital in the Chicago area. In August 1998 the Veterans Health Administration charged a steering committee to develop a report with recommended options for restructuring the delivery of health care to veterans in the Chicago area. The recommended options were to increase the efficiency of the VA health care system by planning for the best use of capital assets in the long term while maintaining or improving the quality of care and ensuring the availability of health care to veterans for many years.

The Veterans Health Administration received in excess of 5,000 comments in response to this VISN 12 Delivery Options Study report. The comments were categorized into broad topic headings and provided to a Review Task Group who met at the end of January under the auspices of the Special Medical Advisory Group (SMAG). The goals of the Review Task Group were to review and evaluate comments received, consider the impact of the comments on the original study options and provide a revised prioritized set of options if indicated.

At an April 5, 2000 House Committee on Veterans' Affairs Subcommittee on Health hearing, VA received congressional guidance on capital asset planning which is applicable to the VISN 12 Delivery System Options Study. The Subcommittee asked VA to develop and adopt objective, measurable criteria for formulating and evaluating options for restructuring the delivery of health care. Presently the Veterans Health Administration is working with VA Office of Financial Management and the General Accounting Office in the development of this criteria. Stakeholder comments will be sought, the criteria finalized and then once developed, will be applied to the various VISN 12 options identified by the Review Task Group.

The outcome of the application of the criteria to the various options will be shared with key stakeholders, as was the case for the first report in September 1999. A second round of comments would extend any decision on the Options Study into fall 2000. Again the purpose of this initiative is to assure that the healthcare needs of veterans residing in the Chicago area are met well into the future.

Question. GAO also recommended that minor construction projects be subject to the same rigorous scrutiny as major construction projects. Do you agree?

Answer. VHA concurs with GAO's recommendations to improve the capital investment decision making process for minor construction projects. A VHA policy directive is being developed and coordinated with the CARES process. This policy for network level capital investment decisions, including those in the minor construction program, will require a multi-level criteria based review. All minor construction initiatives will be subjected to a more rigorous review process at the network level that will include an assessment of minor investments against accepted decision criteria. Following the criteria based evaluation of minor projects at the network these applications will be forwarded to VA Headquarters where a VHA CARES Project Team will validate the proposal prior to implementation by the network. The VA Headquarters' review will ensure that network investment decisions are viable in the context of VHA strategic goals and objectives, statutory requirements, and VA's overall corporate perspective. VHA plans to implement this review process for minor construction projects concurrently with the implementation of the CARES directive in June 2000. Projects in the networks' fiscal year 2001 operating plans will be included.

Question. Will you begin using the Capital Investment Board process for minor construction projects this year?

Answer. The Capital Investment Board process has been developed for reviewing the Department's major capital investment decisions. This process will not be used to evaluate minor construction projects.

Question. Why isn't VA supporting, as it did last year, a Capital Asset Fund to expedite the divestiture of underutilized properties?

Answer. VA continues to fully support the creation of this fund, however, at this time there are a number of intragovernmental issues that need to be worked out before the fund can be established. One of the major issues that needs to be resolved is the how the operations of this fund would relate to the requirements of the McKinney Act that requires that excess Federal properties be offered to homeless organizations. The fiscal year 2000 Capital Asset Fund proposal stated that in order to be exempt from McKinney Act, 10 percent of the net proceeds would be transferred to the Department of Housing and Urban Development to assist in funding homeless assistance groups in local areas. This aspect of the proposal met stiff resistance from some homeless organizations and from other Federal agencies.

VETERANS BENEFITS ADMINISTRATION

Question. A year ago, VA testified that its average days to process claims in 1999 were going to be worse than what was in the budget justification. The budget justification indicated it would take 99 days to process a rating-related action in 1999. It actually took 166 days. Are you satisfied with the progress that has been made in the last year? Why is progress so slow?

Answer. We are not satisfied with the progress that has been made in the last year to improve claims processing timeliness. However, many complex factors have had a cumulative effect on our efforts to improve service. At the same time, we are working to reshape and rebuild the claims process and make changes in our organizational culture and structure that are essential to our long-term success. We are making effort to improve this indicator and we believe have made a good start.

Over the past few years, we have struggled with a number of factors that directly impact our efforts to progress at a more rapid pace:

Workload Management.—We shifted our focus from working newer cases and asked employees to process the older claims. This action was taken to ensure claims continue to move through the system. However, it also caused average processing time to increase.

Because of concerns about our high error rate, we asked employees to take a closer look at the way they process claims. We asked them to write better decisions—decisions which are more easily understood by our claimants and can be sustained through the appellate process.

Increased Difficulty and Complexity of the Workload.—Our employees are faced with significant changes in the body of law governing the compensation and pension programs. Disability decisions must increasingly be prepared using case law rather than a static body of regulations—a more difficult and time-consuming process. The process of evaluating claims using a combination of regulations and precedent decisions is much more complex, and requires additional research time.

VA has made ad hoc changes to the regulations based on the Court's decisions. The consequence of making changes on an ad hoc basis is decreased readability of the regulations. In addition, the changes were written in a bureaucratic and legalistic format which is not easy for employees to interpret. At this time, we are rewriting regulations so that they will have a cohesive structure which employees and veterans can easily understand.

The decisions of the Court have long-ranging effects on our workloads. Precedent decisions which invalidate previously accepted adjudicative practices impact cases in the pipeline and remands. We have also increased the level of resources devoted to training to better support our employees in implementing important Court decisions.

We have struggled with the issue of service-connection for undiagnosed illness for Gulf War veterans. The processing of these claims is contrary to the way we traditionally adjudicate service-connected disabilities. Decisions on undiagnosed illness claims are labor intensive and are therefore completed at the expense of other claims. We have dedicated additional resources to several efforts to ensure that Gulf War veterans claims are properly evaluated.

Changed Organizational Structure.—The first stage of the evolutionary process to our reengineered environment required regional offices to merge Adjudication and Veterans Services Division functions into Veterans Services Centers. While this merger will ultimately result in better customer service, it has required stations to undertake a major cultural and organizational shift. Extensive cross-training of employees must be accomplished. Decisionmakers in the Adjudication Divisions must

now learn or refine their public contact skills and gain general knowledge about other VA benefit programs. Personnel in the Veterans Service Divisions must learn how to adjudicate compensation and pension claims.

We anticipated some service degradation as employees are pulled away from claims processing and customer service activities to undergo training. However, the transition has proven even more labor intensive than anticipated and performance suffered more than expected. We underestimated the magnitude of the training hours required to teach each group of employees the full range of duties and skills needed to function in a merged environment. While we consider this training a critical investment for the future, the enormity of this effort has had an adverse impact on the productivity of the existing workforce. As cross-training is completed and employees are certified in their positions, performance will improve.

Loss of Highly Experienced Decision-Makers.—Succession planning estimates show that about 2,200 decision-makers will be eligible to retire over the next five years. We project that nearly half of this pool of potential retirees will actually retire. In order to avoid a two to three year skill gap, which would exacerbate our service delivery challenges, we have begun a nationwide recruitment initiative to stabilize the C&P workforce.

Question. The number of rating cases pending over 6 months is 68 percent at the Washington, DC RO according to a March "Monday Morning Report," an increase from the July 1999 level of 66.5 percent. This office appears to be the worst in the nation, and was the topic of debate in last year's appropriation hearing. Why has progress actually deteriorated there? What has been done to improve their performance? What interventions does VBA take to improve the performance of "problematic" regional offices?

Answer. Significant progress has been made in resolving the workload situation at the Washington Regional Office over the past eight months. The total number of pending claims has been reduced by over 40 percent (from 12,266 at the end of August to 7,417 as of the end of April). While the over-six-month cases may represent a slightly higher percentage of the current pending workload, the actual number of over-six-month cases has been reduced by nearly 2,400 cases. Since September, we have transferred over 4,000 ready-to-rate cases to other Regional Offices for processing. We continue to broker 200 cases per week to our satellite rating activities in Huntington, West Virginia and St. Louis, Missouri.

At the same time, we have made a major commitment to building the technical capabilities of the Washington Regional Office and increasing the Service Center staffing. Twelve senior level technicians and managers were recruited from across the nation to enhance the experience level of the staff and provide a strong base of technical knowledge and training support. An aggressive training program is in place for all Service Center employees, with over 2,900 hours of training completed during the first six months of this fiscal year. Special training classes for rating specialists have been conducted by C&P Service staff experts. Master rating specialists have been charged with reviewing the work of all rating specialists and providing comprehensive rating board training.

Since September, we have transferred over 4,000 ready-to-rate cases to other regional offices for processing. We continue to broker 200 cases per week to our satellite rating activities in Huntington, West Virginia and St. Louis, Missouri.

The Washington Regional Office is concentrating on completing the development of claims and identifying claims that are ready-to-rate so that decisions can be rendered as quickly as possible.

The Washington Regional Office is a member of Service Delivery Network (SDN) 3. The SDN played a key role in identifying and assessing the workload and performance problems of the Washington office. The SDN is jointly responsible for the operations of all regional offices within the SDN, and is therefore working very closely with Washington's management team to provide assistance and ensure that actions are taken to resolve the situation as quickly as possible.

The performance of all regional offices is monitored continuously through our bimonthly leadership meetings attended by the SDN team representatives and the headquarters top management staff. At every Leadership meeting, we make it a practice to analyze VBA performance across all business lines and in all SDNs. Each team representative is responsible for identifying significant gaps in performance and discussing actions the SDN has taken to remedy those gaps. We review the success of interventions undertaken to improve performance in offices with more difficult workload situations. This process assures that we are constantly assessing the level of service delivery in all program areas and in all regional offices, and that we are sharing best practices and working together to correct deficiencies and improve performance.

Question. The Veterans Service Organizations and the National Academy of Public Administration in their report a few years ago, recommended giving VA program directors line authority over the 57 regional field office directors. VA has resisted making this organizational change but without it, it seems VA headquarters has no real hammer to effectuate the changes which are desperately needed. Why hasn't VA made this change to ensure standards are enforced and managers held accountable for performance?

Answer. The restructuring of our field organization into Service Delivery Networks (SDNs) was designed to increase the responsibility and accountability of field managers for performance. Through the SDN structure, decision-making authority is pushed down to lower levels of the VBA organization, which then allows us to hold managers accountable for their decisions and their performance—and for identifying and effectuating the changes needed to improve performance.

The regional offices are organized under nine SDNs. Directors and program managers in each SDN function as a team, jointly responsible for the delivery of benefits and services within the SDNs' geographic boundaries. The SDNs operate with a practical degree of autonomy, but we have systems in place to ensure their accountability and measures established that evaluate performance on the basis of improvement and outcomes. Performance measures are tied to our Balanced Scorecard and strategic goals.

In restructuring the VBA organization, we recognized the need to maintain a direct line of authority over the field organization. Ensuring a direct line of authority is particularly critical during the initial stages of our evolution to the team-based SDN structure. This line of authority is provided through the Deputy Under Secretary for Operations and his two Associate Deputies. The Associate Deputies are responsible for overseeing the operations of the Service Delivery Networks, including monitoring performance against goals and standards and assuring progress in the implementation of national policies and initiatives. We believe this structure accomplishes the intent of the recommendation of the National Academy of Public Administration.

Question. VA's budget includes $54 million in various electronic initiatives to improve the processing system. How much more will be required in the future to complete these initiatives and have a fully automated, 21st century system?

Answer. VBA developed a Compensation and Pension information technology (IT) strategy called Modern Award Processing (MAP) which examines the claims process from establishment through payment and accounting. This strategy provides guidance for current and future IT development efforts.

In 1999, we enhanced our existing technological tools in order to streamline evidence gathering and tracking processes. The Automated Medical Information Exchange (AMIE) system, the Personnel Information Exchange System (PIES), and the Veterans Appeals Control and Locator System (VACOLS) were successful. In 2000, we expect to have several more tools. Single Logon, which is access to our different applications through one password, was available to the field offices on April 17, 2000. Claims Application Processing Systems (CAPS), which is a rules-based system with case management features, will be available at the field offices by September 2000. Rating Board Automation (RBA) 2000, which is an application used by rating specialists to prepare rating decisions, will be deployed in August 2000. The functional requirements for Virtual VBA have been completed and we will begin building shortly. Development and Case Management and Establish Claim & Award Screen/Design also are expected to be available by the end of this year. In fiscal year 2001, we will have other tools such as Electronic Burial Claims and Social Security Administration Data Exchange.

As we become aware of new technology and develop ways to incorporate that technology into the claims processing environment, we will keep Congress informed of our efforts.

Question. A recent Court decision requires that a veteran must submit, without VA's help, enough evidence to prove that his claim is well-grounded, before the veteran is entitled to government assistance in obtaining evidence. Up until now, when a veteran filed a claim, VA assumed the responsibility of obtaining necessary records. I understand this Court decision is very controversial. How does it affect VBA and all the problems VBA has before it, and what is the Department's position on this matter?

Answer. The court decision, Morton v. West, affected VBA by invalidating certain internal claims development procedures of the Compensation and Pension Service (C&P Service), which supported full development of all claims, as inconsistent with Congress' intent. It led the C&P Service to develop a new policy for claims development pending the final publication of a revised regulation to liberalize the effects of the court's decision. Under this policy, we inform a claimant of the evidence need-

ed to establish a pausible or "well-grounded" claim. While claimants are gathering required evidence, we request their VA medical records and military records. If, after thirty days, the evidence of record does not establish a well-grounded claim, we will deny the claim on that basis. However, we review any evidence we receive in the subsequent year to determine if the claim has been well-grounded.

The Department believes it is still possible, under this court decision, to fashion a fundamentally workable and balanced sharing of responsibilities between VA and a claimant which will best utilize VA's available resources. We agree with the Court that the statutory scheme reflects a policy that implausible claims should not consume the limited resources of the VA and force into even greater backlog and delay those claims which are well-grounded. VA has proposed a regulation which recognizes five exceptions to the well-grounded claim requirement for persons for whom the burden of producing evidence to well ground a claim may be especially onerous.

Question. Will the Court's interpretation worsen the current backlog of claims?

Answer. No, it will improve it. Because a well-grounded claim is accompanied by evidence sufficient to justify a belief that the claim is plausible, including medical evidence, less development action is required to process it. Therefore, we are able to process more claims more quickly. Implausible claims require the most work on our part because the evidence to support such claims is often scant if non-existent, causing multiple requests for this evidence to ensure that we have exhausted all reasonable attempts to find it. Thus, the least meritorious of the claims take up the most time and action on the part of VA. This considerable expenditure of time and effort is counterproductive and causes an overall degradation in the service provided to claimants with plausible claims.

Question. Several pieces of legislation have been introduced to require VA to assist veterans. Does the administration have a position on the legislation?

Answer. We have recommended to Congress that action on this legislation be deferred until the ongoing rulemaking concerning VA's duty to assist claimants has been completed. Our proposed regulation reflects the conclusion of the Veterans' Claims Adjudication Commission that a policy of providing unconditional assistance to all claimants is unneeded and would be a waste of time and resources.

VA NURSING HOME

Question. The VA enters into contracts with private nursing homes as necessary for patient placement—do most nursing facilities request to participate in the VA's Community Nursing Home (CNH) program or does the VA usually seek out nursing homes with whom to contract?

Answer. VA is seeking new Community Nursing Home (CNH) contracts through a national bidding process. Awards are expected in late May/early June 2000. At the local level, CNH Programs will seek out nursing homes to meet a specific care or geographic need. For the most part, CNH is a mature program with a sufficient inventory of nursing homes under contract.

Question. How are CNH applications processed, i.e., are they stored in a centralized and readily accessible record-keeping system? If so, please provide a list of applicants, broken down by state, for fiscal years 1998, 1999 and through March 2000.

Answer. CNH applications are handled locally by a manual process. There is no centralized listing of CNH applications.

Question. Prior to acceptance CNH applicants are evaluated—please describe in detail the CNH evaluation process.

Answer. Local CNH applications are evaluated in one of two ways. The CNH Evaluation Team at the VA Medical Center will review either the latest State Survey Agency (SSA) findings using a hard copy of SSA Form 2567, or the team will review OSCAR (On-Line Survey, Certification and Retrieval) reports. OSCAR reports contain findings of deficiencies for the past 5 years, a catalog of substantiated and unsubstantiated complaints, and patient and staffing profiles. The CNH Evaluation Team is composed of VA staff from Social Work, Nursing, Medicine, Pharmacy, Dietetics, Rehabilitation, Fire Safety, Medical Administration and Contracting. When the team uses the SSA 2567 as their review document, the team will decide which members of the team, other than nursing and social work will make an initial on-site evaluation. Social work and nursing staff will make an initial evaluation in any case. If the team uses the OSCAR system for their initial review, an evaluation visit is not required. VA staff are encouraged to make an orientation visit. Based on the findings of the review and the initial on-site evaluation, if indicated, the CNH team will make a recommendation to the Contracting Officer regarding the home's application.

Question. Does the VA use standardized forms/records in the CNH evaluation process? If so, please describe in detail how the forms/records are used in the evaluation process and provide copies for review.

Answer. VA does not use standardized forms/records in the CNH evaluation process. This was a deliberate decision, following extensive consultation with VA field staff. No consensus was developed on the need for or content of such standardized forms. Absence of standardized forms, however, does not impact the standard approach and process of the evaluation.

Question. Does the VA conduct on-site evaluations of all CNH applications?

Answer. At this time, VA conducts on-site evaluations of almost all CNH applications. VA is moving away from this approach, finding it of marginal use. VA believes that full implementation of OSCAR-based reviews will provide a better assessment of the CNHs.

Question. What percentage of CNH applicants receive an on-site evaluation?

Answer. This information is not readily available and will require a field survey. The information will be provided in a month's time.

Question. What percentage of CNH applicants are rejected? Please provide a list of rejected nursing homes, broken down by state, for each of the following:

—Rejected after an initial CNH evaluation.

—Rejected after on on-site evaluation.

Answer. This information is not readily available and will require a field survey. The information will be provided.

Question. If the CNH evaluation determines that problems exist, are the CNH applicants notified and given an opportunity to make corrections?

Answer. Continued negotiations with a CNH which has not corrected State-found deficiencies will depend on the scope and severity of those deficiencies and the level of interest/need VA has in/for that particular CNH.

Question. How are rejected CNH applicants notified and are explanations provided for the rejections? Describe in detail whether standardized forms/records are used and provide copies for review.

Answer. Rejected CNH applicants are notified by letter of that rejection and the reasons for it. Standardized forms/records are not used in this process.

Question. Does the VA maintain CNH applicant rejection notification and/or explanation forms/records? If so, are rejection notifications and/or explanations integrated into a centralized and readily accessible record-keeping system?

Answer. VA does not maintain centralized files for local CNH applicant rejections. For the national contracts, VA does maintain files on rejected CNHs.

Question. Are rejection notification and/or explanation forms/records shared with HCFA and state regulatory agencies?

Answer. When VA staff conducts a full or partial on-site team evaluation of a CNH and uncovers new deficiencies of a serious nature, HCFA and/or the SSA are notified. When VA staff conducts an OSCAR-based review without an on-site visit and chooses not to contract with the CNH as a result of that review, then HCFA and the SSA will not be contacted. In the latter case VA is directly basing its decision on state-provided information.

Question. Provide a list of CNH participants, broken down by state, for fiscal years 1998, 1999, and through March 2000, that:

—Were suspended from accepting new veterans.

—The VA removed or transferred veterans.

—Were terminated from the CNH program.

—The VA did not renew contract with the CNH participant.

Answer. This information is not readily available and will require a field survey. The information will be provided.

Question. When the VA suspends placement of veterans in CNH facilities, removes or transfers veterans, or terminates nursing home facilities from the CNH program, are HCFA and state regulatory agencies notified?

Answer. HCFA and/or the SSA are notified when any of the events listed in the question occur and are related to poor care delivered in the CNH.

Question. When CNH participants' contracts are not renewed are they provided with an explanation?

Answer. CNHs are notified in writing when the CNH is not renewed for cause. An explanation is provided.

Question. Describe in detail the CNH quality assurance plan?

Answer. Listed below is the text from VHA's proposed directive on quality assurance in the CNH Program. This directive is in the final stages of concurrence within the VHA. Access to HCFA's Quality Indicators is expected to be available in the next six months. Current practice, based on re-hospitalizations, is described in Item number 6b, below.

Quality Assurance in the CNH Program

(a) The VA center will integrate the CNH Program in its Quality Assessment and Improvement Program. Quality indicators may be identified through review of the HCFA Facility Quality Indicator Profiles.

(b) CNH clinical indicators may include, but are not limited to, patient deaths at the Nursing Facility, multiple medication usage, psychotropic drug use, skin care, accidents and patients or family complaints about the CNH. Information on these indicators is available through the HCFA Facility Quality Indicator Profile. For patients readmitted to the medical center from CNHs, clinical indicators may encompass, but are not limited to the following areas: CNH-acquired pressure ulcers; falls with injury; medication errors with adverse effects; other issues as determined by the medical center.

(c) Patients readmitted to the VA medical center from CNHs will be evaluated for incidents in accordance with M–2, Part I, Chapter 35.

(d) The VA to improve care and make decisions about renewing contracts will use results of quality assessment and improvement activities.

Question. Does the VA maintain forms/records of evaluations and/or observations in the CNH quality assurance plan? If so, please describe in detail how the records/forms are used and provide copies for review.

Answer. VA does not maintain such records at the national level. This information is not readily available and will require a field survey. The information will be provided.

Question. How are CNH quality assurance forms/records processed, i.e., are they stored in a centralized and readily accessible record-keeping system?

Answer. Quality assurance forms are maintained at the Veterans Affairs Medical Center (VAMC) level. There is no centralized record keeping.

Question. Describe in detail the CNH follow-up service plan?

Answer. CNH follow-up services are provided every 30 days by VAMC staff. The health care record is reviewed, and VA staff discusses the care plan with the CNH staff and the patient. Any problems with the care or with the veteran's adjustment to the CNH are also discussed. The need for additional VA services are discussed, e.g., visit to specialty clinics.

Question. Does the VA maintain forms or records of evaluations and/or observations in the CNH follow-up service plan? If so, please describe in detail how the records/forms are used and provide copies for review.

Answer. Documentation of CNH follow-up services are contained in the VA health care record. These notes, along with SSA 2567 or OSCAR information and the review of re-hospitalizations, are used as part of the annual review process of the CNH. Attached is a sample OSCAR Report. Form SSA 2567 consists of multiple pages and not readily available at VA Central Office. We will provide a copy as soon as we receive it.

SAMPLE OSCAR REPORT

OSCAR REPORT 3
HISTORY FACILITY PROFILE

PROVIDER
PHONE NUMBE
PARTICIPATION DATE: 04/01/1992

FACILITY BEDS
TOTAL: 102
CERTIFIED: 102

TYPE ACTION: RECERTIFICATION
TYPE OWNERSHIP: FOR PROFIT - CORPORATION

STATE'S REGION CODE: 001

COMPLIANCE STATUS: FACILITY MEETS REQUIREMENTS BASED ON AN ACCEPTABLE PLAN OF CORRECTION

RESIDENT CENSUS ON 01/13/1998

TOTAL:	76
MEDICARE:	3
MEDICAID:	68
OTHER:	5

LTC ADMISSION/SUSPENSION DATES

ADMISSION SUSPENDED:	18	18/19	19	ICF/MR
SUSPENSION RESCINDED:	--	-----	--	------
		13	89	

TOTAL CERTIFIED BEDS: 102

CURRENT SURVEY REVISIT DATES - NONE

PRIOR 3 SURVEY 10/1994	S/S CODE	PRIOR 2 SURVEY 12/1995	S/S CODE	PRIOR 1 SURVEY 11/1996	S/S CODE	CURRENT SURVEY 01/13/1998	S/S CODE	PLAN/DATE OF CORRECT	PROGRAM REQUIREMENTS
				X	B				REQ F0156-INFORM RES OF SERVICES/CHARGES/LEGAL RGTS/ETC
X				X	G				REQ F0157-INFORM OF ACCIDENTS/SIG CHANGES/TRANSFER/ETC
		X	C						REQ F0170-RESIDENT CAN SEND/RECEIVE UNOPENED MAIL
				X	G				REQ F0224-POLICIES PROHIBIT ABUSE, NEGLECT
				X	D				REQ F0225-NOT EMPLOY PERSONS GUILTY OF ABUSE
X									REQ F0241-DIGNITY
				X	G				REQ F0242-SELF-DETERMINATION - RESIDENT MAKES CHOICES
X									REQ F0248-ACTIVITY PROGRAM MEETS INDIVIDUAL NEEDS
X				X					REQ F0250-MEDICALLY RELATED SOCIAL SERVICES
X									REQ F0252-SAFE/CLEAN/COMFORTABLE/HOMELIKE ENVIRONMENT
X									REQ F0272-COMPREHENSIVE ASSESSMENTS
				X	B				REQ F0276-QUARTERLY REVIEW OF ASSESSMENTS
				X	B				REQ F0279-DEVELOP COMPREHENSIVE CARE PLANS
				X	E				REQ F0282-SERVS BY QUALIFIED PERSONS IN ACCORD W/ CARE PLAN
				X	D				REQ F0284-REQUIREMENTS FOR POST-DISCHARGE PLAN OF CARE
				X	G				REQ F0309-PROVIDE NECESS CARE FOR HIGHEST PRAC WELL BEING
				X	G				REQ F0314-PROPER TREATMENT TO PREVENT/HEAL PRESSURE SORES
X									REQ F0316-APPROPRIATE TREATMENT FOR INCONTINENT RES
				X	B				REQ F0323-FACILITY IS FREE OF ACCIDENT HAZARDS
				X	D				REQ F0330-NO USE OF ANTIPSYCHOTIC DRUGS EXCEPT WHEN NECESSA
X				X	H				REQ F0353-SUFFICIENT NURSING STAFF ON A 24-HOUR BASIS
				X					REQ F0354-USE OF CHARGE NURSE & REGISTERED NURSE
X									REQ F0363-MENUS MEET NUTRIT NEEDS/PREP IN ADVANCE/FOLLOWED
X									REQ F0364-FOOD PROPERLY PREPARED, PALATABLE, ETC.
		X	E						REQ F0368-FREQUENCY OF MEALS/INTERVALS BETWEEN MEALS
X									REQ F0371-STORE/PREPARE/DISTRIB FOOD UNDER SANITARY CONDS
				X	D				REQ F0406-FACILITY PROVIDES SPECIALIZED REHAB SERVICES

C=DATE OF CORRECTION N=NO DATE GIVEN P=PLAN OF CORRECTION R=REFUSED TO CORRECT W=WAIVED X=DEFICIENT
COP = CONDITION REQ = REQUIREMENT

OSCAR REPORT 3
HISTORY FACILITY PROFILE

PROVIDER

PRIOR 3 SURVEY 10/1994	S/S CODE	PRIOR 2 SURVEY 12/1995	S/S CODE	PRIOR 1 SURVEY 11/1996	S/S CODE	CURRENT SURVEY 01/13/1998	S/S CODE	PLAN/DATE OF CORRECT		PROGRAM REQUIREMENTS
				X	D				REQ	F0426-FACILITY PROVIDES PHARMACEUTICAL SERVICES
				X	C				REQ	F0431-PROPER LABELING OF DRUGS & BIOLOGICALS
X									REQ	F0441-FACILITY ESTABLISHES INFECTION CONTROL PROG
X									REQ	F0442-FACILITY ISOLATES RESIDENTS WHEN APPROPRIATE
X									REQ	F0455-FACILITY HAS EMERGENCY ELECTRICAL POWER
X									REQ	F0465-ENVIRONMENT IS SAFE/FUNCTIONAL/SANITARY/COMFORTAB
		X	E						REQ	F0468-CORRIDORS HAVE FIRMLY SECURED HANDRAILS
				X	D				REQ	F0514-CLINICAL RECORDS MEET PROFESSIONAL STANDARDS
X									REQ	F0516-FACILITY SAFEGUARDS CLINICAL RECORDS
				X	D				REQ	F0518-TRAIN EMPLOYEES, EMERGENCY PROC/DRILLS

EDITION OF LSC APPLIED

81 EXIST PRIOR 3 SURVEY 10/1994	81 EXIST PRIOR 2 SURVEY 12/1995	81 EXIST PRIOR 1 SURVEY 11/1996	81 EXIST CURRENT SURVEY 01/12/1998	PLAN/DATE OF CORRECTION	LSC DEFICIENCIES - BLDG NO. 01
X					K0012-CONSTRUCTION TYPE
			X C	02/11/1998	K0027-DOORS IN SMOKE PARTITIONS
X					K0062-SPRINKLER SYSTEM MAINTENANCE

C=DATE OF CORRECTION N=NO DATE GIVEN P=PLAN OF CORRECTION R=REFUSED TO CORRECT W=WAIVED F=FSES X=DEFICIENT
COP = CONDITION REQ = REQUIREMENT

PROVIDER

TYPE OF DEFICIENCY	CURRENT SURVEY	PRIOR 1 SURVEY	PRIOR 2 SURVEY	PRIOR 3 SURVEY
CONDITION	0	0	0	0
REQUIREMENT	0	21	3	16
HEALTH TOTAL	0	21	3	16
LIFE SAFETY CODE	1	0	0	2
LIFE SAFETY CODE + HEALTH	1	21	3	18

COMPLAINT SURVEY INFORMATION

SURVEY DATE	STATUS
07/10/1997	SUBSTANTIATED
09/11/1997	UNSUBSTANTIATED
01/13/1998	UNSUBSTANTIATED
07/28/1998	SUBSTANTIATED

FMS SURVEY INFORMATION

* NO FMS SURVEYS FOR THIS FACILITY

Question. How are CNH follow-up service forms/records processed, i.e., are they stored in a centralized and readily accessible record-keeping system?

Answer. Documentation of CNH follow-up services is contained in the VA health care record. There is no centralized record keeping of this information.

Question. Are CNH participants provided with follow-up service forms/records of evaluations and/or observations?

Answer. CNH participants are generally not provided with information on a specific follow-up visit or evaluation.

Question. If problems are identified during CNH follow-up service are HCFA and state survey agencies notified?

Answer. HCFA and/or the SSA is notified when serious problems are uncovered by a VA follow-up visit.

QUESTIONS SUBMITTED BY SENATOR LARRY CRAIG

TRICARE

Question. What is the status of the Memorandum of Understanding between the Veterans Administration and the Department of Defense for the procedures for providing medical services to TRICARE-dependent military retirees in the Veterans Medical Centers?

Answer. Section 113 of the Veterans' Millennium Health Care and Benefits Act, Public Law 106–117, provides for reimbursement to the Department of Veterans Affairs (VA) for medical care provided to certain eligible military retirees. The law states that the Secretary of Defense and the Secretary of Veterans Affairs shall enter an interagency agreement not later than nine months (August 31, 2000) after the law's enactment to implement this section.

The law states that implementation would be phased in across the country. The first contract award for TRICARE 3.0 is scheduled for the summer of 2001. Thus, a minimal amount of revenue will be obtained in fiscal year 2001.

The two Departments and the Office of Management and Budget (OMB) are working together to resolve some implementation issues in preparation for the development of the memorandum of understanding (MOU) that is required by the statute. The Department of Defense and Department of Veterans Affairs have interpreted the previsions in this section differently and we are working to achieve a common understanding. We remain hopeful that we will be able to meet the date of August 31 for completion of a MOU. From VA's perspective, requiring TRICARE beneficiary cost sharing would be a major disincentive for retirees to use this program. VA remains hopeful of meeting the agreement date of August 31, 2000.

TRAVEL REIMBURSEMENT RATES

Question. Considering the rising gas prices, what flexibility does the Veterans Administration have in adjusting the travel reimbursement rates?

Answer. Each time there is an increase in travel allowances for Federal employees, Section 111 of Title 38 U.S.C. requires VA to conduct an analysis of the adequacy of mileage rates for travel by VA beneficiaries.

Mileage rates for Federal employees were increased on January 14, 2000. As a result of that increase, VA has began the required analysis of beneficiary travel mileage rates.

CLAIMS AND APPEAL PROCESS

Question. What are the short-term and long-term procedures and policy changes which can be used to expedite the claims and appeal processes?

Answer. VBA continues to merge veterans services functions with adjudication functions into Veterans Services Centers where veterans service representatives use a case manager approach to complete claims for veterans benefits. Although this merging of functions initially adversely affects our ability to complete claims, the long term effect will be the ability to provide more timely and accurate service to our veteran customers.

VBA is committed to improve performance in claims processing, and the revised process which is demonstrated in the number and type of initiatives which are currently dedicated to achieving our performance improvements.

One critical area to be addressed in which to expedite the claims and appeal processes is the performance of claims development, disability examinations, and the preparation of rating decision for service persons awaiting discharge from active duty. Currently we have a physical presence in several military separation points in the United States, and ultimately it is our intention to provide every separating

service person, regardless of point of separation, with a physical examination adequate for rating purposes according to VA protocols.

Another important initiative for VBA is Virtual VBA (VVBA), a project that will launch VA into the 21st Century by allowing VA to process veterans' claims in an electronic environment. This will eliminate the now paper intensive and time consuming manual claims process.

The Personnel Information Exchange System (PIES) component for requesting service medical records and service verification from National Personnel Records Center (NPRC) to VA Regional Offices has been implemented since December 1998. During this initial development, additional requirements were identified. The PIES application will electronically submit information requests to all military records centers. These electronic linkages will eliminate the current cumbersome paper process. In addition, the Department of Defense (DOD) is engaged in the design and development of two initiatives which will have a direct bearing on our ability to acquire claims information. The first will attempt to create an on-line common pay and personnel system for all the military services, which will provide VBA with the ability to acquire the requisite service date, including data previously contained on the DD 214. Currently, all military services have optical digital imaging systems which are utilized for storing documents from the Office Military File. The second initiative will allow us to have access to all these optical digital-imaging systems from individual workstations. This will give the ability to select documents pertaining to claims development and further eliminate paper processing.

For a period of one-year we tested the viability of the Decision Review Officer (DRO) position as an enhancement to the appeal process. The results of the test indicated significant improvements in the appellate process. Timeliness of the decisions, from the date of the formal appeal to the date of the final decision, was reduced from an average of 421 days to 316 days. The DRO program will be implemented nationwide by September 2000.

CROHN'S DISEASE

Question. Is Crohn's disease being considered as a presumed disability under Agent Orange?

Answer. In establishing presumption of service connection for specific diseases and exposure to Agent Orange by United States veterans of the Vietnam War, the Department of Veterans Affairs relies extensively upon the periodic reviews of the scientific and medical literature conducted by the National Academy of Sciences Institute of Medicine (IOM). The IOM has published three major reviews on this topic (in 1994, 1996, and 1998), and a fourth review is due by the end of this calendar year. Crohn's disease has not been linked to Agent Orange exposure in previous IOM reviews on this topic. The IOM would consider this possibility in its future reviews of veterans and Agent Orange only if there is available scientific or medical literature that makes this association that it could review.

COMMUNITY BASED OUTPATIENT CLINICS

Question. To provide better and more local medical care, what are the plans to provide more services to veterans at the outpatient clinics?

Answer. The major goals of Community Based Outpatient Clinics (CBOCs) include the following:

—Improving geographic access
—Disease prevention/wellness approach
—One provider coordinating care for patients
—Quicker access to care and reduce need for service at parent facilities
—Increasing convenience
—Increasing pre-admission work-up and post discharge follow up to shorten hospital length of stay

The CBOCs have always been intended to provide primary care services. Veterans Health Administration (VHA) also now requests that facilities examine the need for mental health services. Although some CBOCs do provide some specialty services such as podiatry or ophthalmology on a limited basis, VA does not anticipate that these clinics will expand beyond the basic services they were initially intended to provide. VA does not anticipate a proliferation of expanded service outpatient clinics, rather it will continue to expand access to primary care services and, as the veteran need dictates, expand beyond primary care selectively.

QUESTIONS SUBMITTED BY SENATOR PATRICK J. LEAHY

CLAIMS PROCESSING

Mr. Secretary, I continue to receive mail from Vermont veterans about problems they are having with their claims. Some tell me that it takes on excessive amount of time, sometimes over six months, for the Veterans Benefits Administration to respond to their claims applications. Others have complained about the accuracy of the administration's response, saying that VBA has simply responded wrongly to their claims.

I understand that VBA is undertaking several initiatives to increase the speed and efficiency of the claims calculation process, but I am concerned that the administration is not taking advantages of new technologies that will assist in claims calculation. For instance, I understand that VBA is considering a new technology called clinical couplers which is an advanced decision-making software that can automate claims processing and improve the accuracy of reviews.

Question. Does VBA plan to implement these new advanced technologies to the claims calculation process? Are there funds in the fiscal year 2001 budget request to support such an initiative?

Answer. VBA has made improvement in technical accuracy its first priority. In 1997, we developed the Systematic Technical Accuracy Review (STAR) program, to replace the C&P's Quality Assurance (QA) program. STAR will be fully implemented this year. Complimenting the STAR program is Systematic Individual Performance Assessment (SIPA), which brings performance assessment and accountability to the journey-level individual. This is a system that will enable local management to consistently monitor individual performance.

In addition, our commitment to improved performance in claims processing is demonstrated in the number and type of initiatives dedicated to achieving our performance improvements. These initiatives have been designed to streamline or enhance the claims process while providing employees better tools with which to serve veterans.

We have developed a Compensation and Pension information technology (IT) strategy called Modern Award Processing (MAP) which examines the claims process from establishment through payment and accounting. Our Training and Performance Support Systems (TPSS) contains comprehensive training and performance support systems for the core service delivery positions of the reengineered environment. Rating Redesign, along with the Rating Board Automation 2000 tool, will help to restore an analytical approach to the rating decision.

We recently became aware of the knowledge coupler technology. This technology does not recommend a decision, but gives options for a decision and the factors in the unique claim fact pattern that support or fail to support each possible decision.

Question. Are there funds in the fiscal year 2001 budget request to support such an initiative?

Answer. No funds were requested in the fiscal year 2001 budget, however, we have just contracted out for the development of a prototype in the area of psychiatry.

QUESTIONS SUBMITTED BY SENATOR BARBARA A. MIKULSKI

FORT HOWARD

Question. Theme.—Enhancing the quality of life for our aging veterans in Maryland and across the country.

Point.—VA must stand sentry on the Fort Howard transition plan, and there must be a single point of contact regarding Fort Howard. Because the inclusion of a new State Veterans Home at Fort Howard is now unlikely, we need clear answers on how this development will affect VA's plan and the timeline for Fort Howard.

Who is the point person at VA who is in charge of Fort Howard?

Answer. Mr. Dennis Smith, Director of the VA Maryland Health Care System (VAMHCS), Phone Number (410) 605–7016, is in charge of Fort Howard. Mr. Alan Hackman, Executive Officer, Phone Number (410) 605–7000, has the daily duty of operational oversight for Fort Howard, and is in charge of the Fort Howard Mission Review and Campus Revitalization project.

Question. What is the current status of the Fort Howard mission change proposal?

Answer. The proposed Fort Howard Mission Change and Campus Revitalization project with stakeholder comments is currently being analyzed in Headquarters for the Secretary of the Department of Veterans Affairs' review and decision.

Question. When can we expect a final decision on this?

Answer. VA anticipates a decision within two months.

Question. It appears that the state will not authorize construction of a State Veterans Home at Fort Howard. If the state does not build a Veterans Home at Fort Howard, what impact will this have on the overall plan for Fort Howard?

Answer. No effect. The State Veterans Home is a nice complement to the proposed continuum of care housing proposed, but neither the mission change nor the Enhanced-Use project, depend on that presence. Current plans will set aside property for the potential State Veterans Home and the VA welcomes a presence now or in the future.

Question. What is the current status of the Fort Howard facility?

Answer. Fort Howard continues to operate "status quo" pending final approval of the mission change by the Secretary of the Department of Veterans Affairs.

Question. What changes can veterans served at Fort Howard, their families, and VA employees expect in the coming months?

Answer. Upon approval by the Secretary of the Department of Veterans Affairs, the mission change will begin being implemented. There are several construction projects that will need to be accomplished before large-scale relocations can be accomplished. In anticipation of the approval, these projects are currently being designed. The complete relocation of all inpatient functions from Fort Howard is estimated to take 18 to 24 months to complete.

Question. What are the plans for the enhancement/expansion of the outpatient clinic at Fort Howard?

Answer. The primary care clinic will continue to operate without interruption. Current plans are to relocate this function temporarily to a one level building (building 249) behind the main hospital building. If the plan is approved by the Secretary of the Department of Veterans Affairs, under the proposed Enhanced-Use development of the campus, a new primary care building will be constructed.

Question. How is the VA working with the community and VA patients to ensure that patient care at Fort Howard is maintained and improved during the transition process?

Answer. The VAMHCS has given over 30 presentations to the numerous stakeholders including the Veteran Service Organizations, the VA employees, unions, local county and government officials, local community interest groups, and the local community at large. During these presentations it has been stressed that all current inpatient programs will continue, but will move to another VAMHCS site. The relocations are expected to enhance patient access to follow-up care at the downtown facility and increase hospice and respite bed access.

Question. What specific steps have been taken to ensure that this occurs?

Answer. During the presentations given, the VAMHCS has been responsive to concerns raised over some of the consultant's original recommendations. For example, the original plans to relocate the dementia unit at the Baltimore Rehabilitation and Extended Care Center (BRECC) to the Perry Point facility has been revised due to concerns over the adaptability of those patients to such a move. In its place, a more general nursing home population will now be relocated.

ALLEGATIONS

Question. Secretary West, are you personally aware of the allegations raised by these employees and Maryland residents?

Answer. I have been briefed on the nature of the allegations.

Question. I sent a letter and supporting material regarding these allegations on February 4, 2000, asking you to review these complaints and to report back to me as soon as possible. To date, I have only received an interim response from Eugene Brickhouse, your Assistant Secretary for Human Resources and Administration. A final report was promised within 30 days (March 30).

Answer. I directed the Assistant Secretary for Human Resources and Administration to provide an interim and final response to you since the matters brought to my attention fall under the Assistant Secretary for Human Resources and Administration's responsibilities. The Honorable Eugene A. Brickhouse was appointed by the President and confirmed by the Senate to occupy this most critical position. Mr. Brickhouse provided you with a final response on April 7, 2000. On March 30, a member of your staff, Mr. Sean Smith, met with Ms. Ventris Gibson, Deputy Assistant Secretary for Resolution Management, to discuss the allegations and provide you with information that would be in the final response. Following the hearing, Mr. Brickhouse and Ms. Gibson spoke with Mr. Smith to further provide assurance that we would maintain contact with your office.

Question. Why have I not heard from you personally on this most important matter?

Answer. On matters involving discrimination complaints processing or allegations of discrimination, I endeavor to be fair and impartial, affording all parties due process and maintaining a posture of independence. Since the allegations involved discrimination complaints pending within the Department or before the EEOC, my neutrality must be unwavering and unquestionable. This does not, however, inhibit my ability to exercise leadership over diversity management issues. For this reason, I have taken steps to see that the appropriate leaders within the Department and addressing these matters.

Question. Why has this deadline come and gone without a complete final report from anyone at VA?

Answer. On April 7, 2000, Mr. Brickhouse provided your office with a final report.

Question. Are you personally involved in this matter?

Answer. To the extent appropriate, I have provided executive direction to the responsible senior leaders and required their involvement, consistent with the employees' rights and the integrity of the process.

Question. Your issued a memorandum to VA employees on September 22, 1999 on harassment and discrimination at VA. However, is this policy being implemented and carried out at VA?

Answer. The policy was fully implemented on September 22, 1999, and is in effect Department-wide.

Question. Specifically how?

Answer. The September 22 letter to all VA employees provides for appropriate disciplinary and adverse action to be taken against those individuals who engage in harassing behavior or other discriminatory conduct should an investigation reveal that such misconduct occurred. Allegations, even multiple allegations, of discriminatory acts are an inadequate basis upon which to find discrimination or to impose discipline. VA would violate the rights of those alleged to have committed discriminatory acts when the case has not been fully adjudicated. When a finding of international discrimination or retaliation occurs, the respective VA organization takes appropriate personnel action affording due process as required by Federal regulations.

Question. Upon review of these complaints, it is clear that the majority come from one area of VA—the Office of the Assistant Secretary for Information and Technology and the Washington Regional Office. In addition, there are now complaints against the Office of Resolution Management, who is charged with the authority to thoroughly investigate allegations like these. What action is being taken to look into these areas of VA?

Answer. On March 29 and April 6, the Department advised each concerned employee, in writing, to contact a designated official within the office where he or she worked to discuss his or her concerns and attempt resolution, where possible. Senior leaders in the Veterans Benefits Administration and the Office of Information and Technology have initiated steps to meet with these employees. In ORM, the employee who wrote to you filed several complaints; all but one of these complaints was against the employee's former employing office, not ORM. The Office of Employment Discrimination Complaint Adjudication (OEDCA) dismissed the complaint the employee filed against ORM because the employee failed to provide requested information relative to the specific nature of his allegations. The Deputy Assistant Secretary for Resolution Management met with the employee within her organization to determine the specific nature of the employee's complaint. ORM also employs an Employee Executive Ombudsman for ORM employees who wish to discuss workplace or personal issues, or to mediate disputes. The establishment of this position is consistent with EEOC's guidance to ORM on addressing internal concerns, should they arise.

Question. VA's own statistics appear to confirm that there are few promotions of minorities in VA. In addition, they show that the majority of minorities at VA are within the lowest payscales. What is being done to address this discrepancy?

Answer. We believe that we can do more, as there is room for improvement. For example, VA is developing a plan in support of our diversity efforts to ensure that African Americans and other minorities benefit from all employment, advancement, and training opportunities available in the Department. The plan includes a focused effort on increasing the representation of African Americans in grades GS–7 through GS–12, and in grades GS–13 through GS–15, the primary feeder group from which we can develop a representative pool of candidates for the Senior Executive Service. We will continue our plans to provide additional developmental opportunities, mentoring assignments, and ensure recognition and awards for outstanding contributions toward this effort.

Question. What specific plans are in place to help move minorities up the ranks at VA?

Answer. VA conducts On-Site Equal Employment Opportunity Technical Assistance Reviews at field facilities around the country. Local and national union representatives are consulted during these reviews and have, at times, served on the review team. These reviews address the employment concerns of all employees, minorities, and non-minorities. The team provides the facility Director with recommendations to correct deficiencies noted during the review. Other initiatives include:

—African Americans are included in external training programs such as the Women's Executive Leadership Program, the Federal Executive Institute, Aspiring Leaders Program, and the Management Development Centers.

—VA revised the Performance Appraisal process for senior executives to include a section on equal opportunity and diversity. The new requirement is that senior executives must show measurable progress in improving employment opportunities for women and minorities and increasing the diversity of organizations under their control.

—Prior to any senior executive being considered for a bonus or pay adjustment, the respective Under Secretary or Assistant Secretary must provide specific written examples of how the executive has contributed, by his or her actions, to a diverse workforce ensuring equal opportunity to all.

—ORM conducts trend analysis of discrimination complaints. Part of the trend analysis focuses on the underlying causes of allegations of discrimination when such allegations do not rise to the level of discrimination, for example, common workplace disputes. Since employees utilize the EEO complaint process to air common workplace disputes because they believe

VA RESEARCH PROGRAM

Question. VA is not requesting an increase in fiscal year 2001 for its research program. Please comment on the reason for this decision.

Answer. The request for fiscal year 2001 assures that all of our resources available to VA Research will be used with maximum efficiency.

VA currently funds approximately two thirds of the research program using non-VA research appropriations. It is anticipated that VA will increase funding from these sources so the research program will continue to grow and remain a national resource.

Question. I understand that VA has implemented a new policy intended to help solve the problem physician-investigators have in finding time to conduct research. What is the current status of this policy?

Answer. The "policy" referred to above was an interim arrangement, functional only for the fiscal year 2000 allocation period, pending development of a more comprehensive allocation solution that would assure dependable resource support to the Veterans Health Administration's (VHA) research program. Basically this interim policy calls for a "pass through" of prior local reported costs to support research activities.

Based on guidance from the Acting Under Secretary for Health, VHA's Chief Financial Officer appointed a VHA panel of research and financial specialists to examine and improve the current system of accounting for costs of the Medical Care appropriation that are applied to support VHA research at the facility level (including direct salary costs of clinician-investigators, facilities and administrative costs). This panel completed its analysis and submitted a report to the VHA Acting Chief Financial Officer on April 1, 2000.

The report recommends VHA take four actions:

—Adopt an interim manual spreadsheet accounting system, focused at the VA medical center level of research activity, but with capabilities of "rolling up" research support costs to higher levels.

—Field-test the manual system in a new group of VA medical Centers (it had been tested in ten centers at the writing of the report).

—Reprogram the new automated Decision Support System (DSS) accounting system to carry forward the intent of the manual spreadsheet.

—Pending full national implementation of the new method of accounting for Medical Care expenditures in support of research, extend for fiscal year 2001 the current "pass through" system of local research support, which characterizes VHA allocation policy for the fiscal year 2000 period.

The accounting team report is currently being reviewed by VHA. VHA anticipates presenting the report to the Acting Under Secretary for Health soon for consideration. Assuming approval of the proposal, field-testing of the improved accounting system will require several months. In the interim, a recommendation has been

made to the Acting Under Secretary for Health to extend the "pass-through" policy of support to research in the fiscal year 2001 allocation.

Question. When does it expire?

Answer. As noted earlier, the expiration date is September 30, 2000.

Question. Are there plans to extend this policy?

Answer. A decision by the Acting Under Secretary for Health is pending.

Question. Last year, the Under Secretary for Health announced two new oversight mechanisms for VA research involving humans—one external and one internal. Could you please detail the progress that has been made towards the implementation of each?

Answer. The Office of Research and Compliance (ORCA) is the primary component responsible for assuring compliance with the rules, policies, and procedures to protect human subjects in VA-conducted research. ORCA reports to the Under Secretary for Health. ORCA's responsibilities include compliance through training, education, and development activities, negotiation of VA assurance documents with sites conducting research, and site visits (routine and for cause) to research sites. This office, announced in April 1999, currently has five employees in headquarters and has additional recruitment actions underway. Currently, there are plans for four Regional Offices in ORCA, that will include four employees in each office to help ensure compliance oversight in the 22 Veterans' Integrated Service Networks (VISNs) and approximately 120 Veterans Affairs Medical Centers (VAMCs) that conduct research involving human subjects. The Regional Offices will be in Washington, DC; Atlanta, Georgia; Chicago, Illinois; and Los Angeles, California. Recruitment for their Directors is ongoing. ORCA is completing the final stages of its budget estimates for fiscal year 2000 and fiscal year 2001.

The external mechanism of oversight is based on a contract with the National Committee for Quality Assurance, which is managed by the Office of Research and Development, with participation from ORCA. After open competition, NCQA was selected to review each of VA's sites conducting research and to evaluate them for accreditation for compliance with all VA and applicable Federal requirements for protection of human subjects in research. VA and the contractor will develop standards and pilot testing, and visits will begin later this year. ORCA staff will participate in site visits in conjunction with the accreditation process. In addition, ORCA will receive reports on each site to help assure education and training, and other actions that help promote compliance.

Question. How does VA plan to meet the needs of VA research facilities that need upgrades, renovations, or expansions?

Answer. Our programs in VHA health care facilities engaged in bio-medical research have identified twenty-five sites with high-priority needs for infrastructure improvements, primarily in direct research laboratories (so-called "wet" laboratories). The VA research program is given an annual opportunity, both locally and here in headquarters, to identify capital facilities projects for consideration in the overall VA budget formulation and capital investment review process. The Department's priority-setting process correctly favors patient care and life-safety facilities projects at the highest level of priority. The Chief Research and Development Officer and the Chief Facilities Management Officer will continue to work together to carefully consider research—supportive capital projects during the budgetary process.

Question. In last year's appropriations bill, the Committee supported expanding the number of community-based outpatient clinics which promote Mental Health Intensive Psychiatric Case Management. Research shows economic and health benefits from such clinics and its model, Assertive Community Treatment. Two Public Laws 104–262 and 106–74 charge the Veterans Health Administration (VHA) to maintain capacity by providing for the specialized treatment needs of disabled veterans. What has been done to make certain that money cut from inpatient psychiatric facilities is being used for Mental Health Intensive Psychiatric Care Management programs?

Answer. VHA surveyed each of the 22 VISNs to determine to what extent the savings in costs of inpatient psychiatric care were reinvested in outpatient mental health services. VISNs were asked to compare total costs in fiscal year 1996 for both inpatient and outpatient mental health care to the same costs in fiscal year 1999. That study, which is about to be released to Congress, suggests considerable reinvestment in outpatient mental health services and increases in the number of veterans served.

Various groups in VHA are collaborating to prepare a Directive that will encourage new initiatives in Mental Health Intensive Case Management (MHICM) programs. The directive asserts a policy to:

—Establish new MHICM programs where the need is demonstrated.

—Defines the target population within each VISN.

—Describes what is required to have an effective MHICM program.

—Mentions the monitoring procedures required to determine outcomes.

—Provides VISN-level responsibilities and national oversight.

Question. What is being done to ensure that quality psychiatric care is being offered within the community-based care facilities?

Answer. From fiscal year 1998 to fiscal year 1999, the total number of veterans served by mental health programs increased by 3.3 percent. Over the period of fiscal year 1996 to fiscal year 1999, a 9 percent increase was observed. This has been associated with a decrease in inpatient care, and an increase in outpatient services. Health services research has indicated that nearly half of the new Community Based Outpatient Clinics (CBOCs) offer basic mental health services. VHA believes that access to mental health services in general is increasing.

Although the inpatient workload and dollars have decreased from fiscal year 1996 to fiscal year 1999, outpatient workload and dollars have increased resulting in the total number of veterans served by VA's special emphasis programs increasing from 269,000 to 293,473. The increase in services is accounted for by improvements in access to and utilization of outpatient programs. VHA is a leader in mental health care and is one of the few health systems that support equal access to medical care and mental health care. VA will continue to monitor needs for mental health capability for new, as well as existing CBOCs.

Performance Measures for Mental Health Programs.—The Management Decision and Research Center (MDRC), a part of VHA's Health Services Research and Development Service recommended three performance measures addressing mental health in the community clinics: 1. the number of patients assigned a mental health diagnosis; 2. the average weighted outpatient workload per clinical mental health FTE; and, 3. the percentage of patients seen within 30 days after hospitalization for a mental health disorder.

All measures are compared to the parent VAMCs and are expected to be statistically identical or higher.

In May 1999, in response to the Under Secretary for Health's comments to a recommendation by the Committee on Care of Severely Chronically Mentally Ill Veterans, the Chief Consultant, Mental Heath Strategic Healthcare Group, published criteria for VISN Directors and Clinical Managers for including mental health services in CBOCs. As a benchmark, "if the total number of veterans service-connected for mental health conditions in the 1–15 mile(s) CBOC catchment area exceeds 150, or the number of Priority 1 through 7 veterans exceeds 3,000, then it is strongly recommended that an existing or proposed CBOC would provide (or contract for) general mental health services."

As with all other mental health patients, those seen by a mental health professional in CBOCs, will be assessed using the Global Assessment of Functioning (GAF) scale to help determine whether their overall functioning improves following professional treatment. Used as an outcome measure, the quality of care for each patient or for all patients in each CBOC can be estimated. For fiscal year 2000, the percentage of mental health patients who receive a GAF rating is reported monthly to VISN Directors.

Question. How does VA intend to care for the ever-increasing demand for psychiatric care among veterans?

Answer. VA has increased the number of patients treated by its mental health services nationally. A recent survey shows that six Networks increased the number of patients seen in outpatient mental health facilities by greater than 25 percent from fiscal year 1996–fiscal year 1999. (VISNs 4, 8,10,15, 16 and 19). In fiscal year 1999 Network 10 for example, cared for 34 percent more Post-Traumatic Stress Disorder (PTSD) patients, and 24.2 percent more patients needing substance abuse treatment. VA has developed the largest integrated service delivery system for the homeless in the nation. These changes have been associated with a decrease in inpatient care, and increase in access to and utilization of outpatient programs including treatment at Community Based Outpatient Clinics (CBOCs). Half of all CBOCs currently offer basic mental health services.

Mental health services are addressed by providing a full continuum of care and access to needed medical/geriatric care. VA is working toward better integration of medical care with mental health care for veterans. Ongoing activities in the integration of mental health and medical and geriatric primary care programs and the development of mental health primary care teams demonstrate this.

An acknowledged leader in developing outcome measures of quality of care, VA is focusing its efforts on performance measures for all special disability programs including mental health to ensure that quality, access and service are maintained or improved.

In summary, VA is seeing more patients who suffer from mental disorders more efficiently and with no loss in quality. In fact, patient satisfaction with mental

health services has increased from 1995 to 1999. VA has been able to do this by increasing its use of residential care and outpatient services including CBOCs. VA has also increased its contracting capabilities with non-VA service providers as evidenced by the programs for homeless veterans. VA is using innovative approaches in telemental health to increase access to specialty mental health services in VA community-based sites such as CBOCs and Veterans Outreach Centers. VA will continue using these clearly efficient and effective approaches to maintain capacity and quality of care for veterans with mental disorders.

Question. What is being done to ensure the VA National and Veterans Integrated Service Network Formularies are becoming less restrictive?

Answer. The Congressionally mandated Institute of Medicine (IOM) study of the VA's formulary concludes that VA's National Formulary is not overly restrictive, and that its effects on quality are likely comparable to those of formularies in private and other public sector programs. The IOM report found no reason to abandon the National Formulary yet recommended improvements in the management of the VA formulary system. VA plans to respond constructively to all the recommendations in the report.

Question. What is the status of phasing out a typical medications that could be less expensive but have damaging side effects?

Answer. VA's national formulary process is designed to provide the most efficacious, safe and cost effective medications for use in the veteran population. VHA uses many factors to determine a product's suitability for use in the VA population, including patient compliance, relevance to the veteran population, pharmacy factors, adverse event profile and clinical outcomes. Management of VA's formulary process is a very dynamic activity that is clinically driven by the VA Medical Advisory Panel, a group of field-based practicing physicians; the VISN Formulary Leaders Committee, a group of clinical representatives from each of the 22 VISNs; and various VHA Technical Advisory Panels, which are comprised of senior VHA subspecialty clinicians. Safety and efficacy receive the highest priority in their deliberations.

SUBCOMMITTEE RECESS

Senator BOND. So with that I thank you, Mr. Secretary. I appreciate working with you. If this is our last time, it's always a pleasure to work with you in various generations and different decades. We wish you well and we thank you very much. Hearing is adjourned.

[Whereupon, at 10:40 a.m., Thursday, April 5, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT AND INDEPENDENT AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

WEDNESDAY, APRIL 12, 2000

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

The subcommittee met at 9:36 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Christopher S. Bond (chairman) presiding.

Present: Senators Bond, Mikulski, and Lautenberg.

CORPORATION FOR NATIONAL AND COMMUNITY SERVICE

STATEMENT OF HARRIS WOFFORD, CHIEF EXECUTIVE OFFICER

ACCOMPANIED BY:

WENDY ZENKER, CHIEF OPERATING OFFICER
TONY MUSICK, CHIEF FINANCIAL OFFICER
LUISE S. JORDAN, INSPECTOR GENERAL
KARYN L. MOLNAR, PARTNER, KPMG

OPENING STATEMENT OF SENATOR CHRISTOPHER S. BOND

Senator BOND. The subcommittee will come to order.

This morning the VA–HUD Subcommittee will hear testimony on the President's fiscal year 2001 budget request for the Corporation for National and Community Service, the Chemical Safety Board, and the Department of Treasury's Community Development Financial Institutions Fund.

First we will hear from the Corporation's Chief Executive Officer, Senator Harris Wofford, who will be followed by the Honorable Luise Jordan, the Corporation's Inspector General, and Ms. Karyn Molnar from KPMG.

The subcommittee will then hear from the Chemical Safety Board. Finally, we will have officials testifying from the CDFI Fund.

The Appropriations Committee and the VA–HUD Subcommittee will face another year of very difficult budget decisions due to needs for VA medical care, significant increases in needed budget authority for Section 8 housing assistance contract renewals, and FEMA disaster assistance.

For the Corporation for National and Community Service, the President has requested a significant spending increase. Specifi-

cally, $538.7 million has been requested, an increase of $101.6 million over the $437.1 million provided in fiscal year 2000.

Under the President's budget request, the Corporation would expand the AmeriCorps service from its current membership of 50,000 participants to 62,000 by fiscal year 2001, with a goal of 100,000 in fiscal year 2004. In addition, the President is proposing a number of new initiatives such as creating a new AmeriCorps Reserve program and two new youth programs under its Learn and Serve account.

While the Corporation has a number of laudable goals, such as improving child literacy—that is obviously one of my very strong concerns—there remain many significant issues concerning the management and implementation of its programs.

First, providing an increase in funds to an agency that has been fraught with significant management problems is troubling at best. While I applaud the progress the Corporation has achieved over the past year, there continues to be serious problems.

The Corporation has again received a "clean" opinion on its balance sheet, but a "disclaimer" on its statements of operations and cash flows. The number of material weaknesses has been reduced from eight to five, but a number of reportable conditions and failures to comply with various Federal laws and regulations remain.

We will later hear more from the CNCS's IG and KPMG auditors on these matters, but I must emphasize that I remain concerned about these issues.

Second, there continues to be a question of accountability within the Corporation and the grantees who administer many of its programs.

Last year, the auditors were unable to determine the nature of $31 million in unidentifiable expenditures in the Corporation's financial statements. It was only after this Subcommittee raised concerns about it, that the Corporation's management took action to address this matter.

Unfortunately, the Corporation's contractors were unsuccessful in determining the nature of this $31 million, and to this date, the Corporation still has no documentation or proof on whether those funds were misspent or whether this was simply a series of bookkeeping errors or a combination of both.

It is my understanding that this contractor was also responsible for preparing the Corporation's financial statements. I hope this contractor was not actually paid on its work to identify the $31 million in unidentifiable amounts that it was responsible for creating.

Another major concern is the Corporation's oversight of its grantees. The IG has found numerous problems in this area and continues to cite this as a major internal control weakness.

In this year's budget request, the Corporation has requested the legal authority to provide additional administrative funds to troubled State grantees. Currently, each State commission must provide a 50-percent match for any administrative funds received from the Corporation.

Nevertheless, the Corporation seeks to waive this matching requirement for troubled grantees. More puzzling is the Corporation's request for an additional $3.6 million for this effort. Frankly, this

could be characterized as "throwing good money after bad," or rewarding non-performance or poor performance.

Instead of throwing good money after bad, I wonder: Has the Corporation considered other ideas that would address the problems with its troubled grantees? How about using enforcement actions against troubled grantees? If the Corporation lacks the legislative tools to do this, I would be more than happy to entertain your requests for legislative solutions.

I am also curious to know if the Corporation allows its grantees to take on additional programmatic responsibilities when they have been found to be troubled.

The Corporation admits in its budget justifications that these "oversight problems are occurring at a time when the AmeriCorps grants program is growing significantly." Well, if this is the case, why not reduce the programmatic burdens of these troubled grantees?

Finally, I emphasize the need for the Corporation to resolve fully its long-standing management and financial operations problems. The Corporation has made some real progress over the last year. For that, it deserves recognition and commendation. We are happy to do that.

Moreover, the Corporation has assembled a management team, which is beginning to lay the foundation for sound management.

In your testimony, Senator Wofford, you state that the Corporation's "programs will depend upon the effective management of the resources dedicated to these purposes." While I agree completely with that statement, it seems questionable to me that the Corporation would increase its program workload when it still has not cleaned up its management problems.

It seems like the Corporation is trying to fix a bike while riding it at the same time. I would hope that the Corporation will seriously consider my suggestion that you need to slow down and maybe take a minute to get off the bike before you start riding it again. In this city, I have seen a lot of potholes, and I think that would be good advice whether you are riding a bike or running a troubled agency.

I will now turn to my ranking member, Senator Mikulski for her statement and comments.

STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. Thank you very much, Mr. Chairman.

And I want to welcome the National Service Chief Executive, Senator Harris Wofford and, of course, the Inspector General, Ms. Luise Jordan, to our first panel.

I am very proud of the role that I played in helping to create National Service, the original authorizing framework. And I would hope in the next session of Congress, we could review the authorizing framework and really bring it in alignment with really the evolution and lessons learned from the more, now, than 6 years of the existence of National Service, because I think we all agree on both sides of the aisle that volunteerism is one of the best aspects of the United States of America.

And volunteerism is the backbone of our communities, working from seniors to community cleanups to helping your children get ready to learn.

The whole idea behind National Service was to link our values to public policy and to provide young Americans with an opportunity of doing community service and earning a voucher to reduce their student debt.

In my own home town of Baltimore, college tuition is escalating, where at Johns Hopkins the tuition next year will be $33,000. Not everybody can get into Hopkins either because of SAT scores, or finances. But I would hope getting into the college of your choice would be based on your SAT scores and your dream, and not on your family's wallet. And this is a tool that we hope would be able to help with student debt.

We also wanted to link responsibility to opportunity. I am a firm believer that for every opportunity, there should be an obligation. And this is what we were going to promote.

So we look forward to hearing the results of now more than 5 years of the existence of the Corporation for National Service, on what it has meant to communities and what it meant to the volunteers who participated and the way they have either utilized the student voucher to go on, if they are the first one in their family to go to college; or to reduce student debt so they could either go on to volunteerism, or even careerism, non-profit organizations.

We also want to look at kind of the new innovations that have developed with the new economy. I want to be hearing from the—from Senator Wofford really about his relationships with the private sector, not only the wonderful things I know about the cooperation with General Colin Powell, but also the private sector in terms of the high-tech crowd, what—Steve Case's Power Up and other things that you have been doing, and then to discuss with him the idea of an E-Corps that I am advocating to help boys and girls cross the digital divide.

I am not talking about E-Corps volunteers being a substitute for teachers or a substitute for paid local government staff and programs. But one of the things that we have heard about, and clear, is that—two things: One, there is a work force shortage in America, but there is really a skill shortage. We have zip codes of prosperity, and yet high zip codes of unemployment.

If we could help our boys and girls learn the tools of the new economy and learn—and have their parents learn the tools of the new economy, they could literally be able to leapfrog out of poverty.

My E-Corps idea would be for the AmeriCorps volunteers to teach the teachers. Very often, our teachers have not had the technological training in order for them to make highest and best use of the technology we want to bring to the classroom.

So after the volunteers leave, we want to have in place teachers who have benefitted from their youth, their enthusiasm and their technical know-how, so they can keep it going in the classroom long after the volunteers leave. It is the old thing about let us—if we teach the teachers, then we have taught the children forever.

We will also be talking today about the issues around financial management; and we will be happy to hear from Anthony Musick, who was confirmed in November, what he found and some of the

management issues, many of which have been raised by Senator Bond.

I will talk about the Chemical Safety Board and CDFI when those very able people come to the table. But for now, I am ready to listen to Senator Wofford, to move the hearing on.

Senator BOND. Thank you very much, Senator Mikulski. I am most interested in your E-Corps idea. Sometime when we have more time and are not on the record, I will tell you about the problems I have confronted as an old dog trying to learn the new tricks of computers and E-commerce, but not where it is going to be on the public record. [Laughter.]

Senator MIKULSKI. Well, getting booted has a whole new meaning, does it not?

Senator BOND. I do not even understand that. Senator Wofford.

Senator WOFFORD. Me, too, Mr. Chairman, with my problems on the computer. I need some of those teachers to help me. Thank you very much, Mr. Chairman and Senator Mikulski.

Mr. Chairman, if my remarks do not respond to all of your suggestions, we—and we do not have time today, but we want to respond to your——

STATEMENT OF HARRIS WOFFORD

Senator BOND. We will have—we will raise some of the issues in questions and answers and also give you an opportunity to respond in writing. We will keep the record open, making your full statement a part of the record, and asking you to summarize.

Senator WOFFORD. Thank you.

I would like to introduce Wendy Zenker, the Corporation's Chief Operating Officer and Tony Musick, our Chief Financial Officer.

Let me start by thanking the committee for your support over the past years. The National Service would not be where it is today without your help.

Four and a half years ago when the President asked me to head the Corporation, he gave me a very specific charge: To make National Service a non-partisan enterprise in which all Americans take pride, like the Peace Corps and the Armed Forces. Even before I was confirmed, I was confronted with the second challenge, to strengthen management practices at the Corporation. These two imperatives have been my focus, and I will report briefly on both.

Under the guidance of your committee, the Corporation developed a detailed action plan to set our course on management improvements. We report regularly to the committee on this plan, so you have seen the progress we have made.

We now have a strong financial management team that has brought rigor and discipline to our business operations. Since our meeting last year, we have added an exceptionally gifted chief financial officer, Tony Musick, as well as a deputy CFO and a chief information officer.

Mr. Chairman, I want to thank you especially for your help in securing Tony's confirmation last fall. It was down to the wire, and you made sure that Tony was confirmed before Congress recessed, and it has made a great difference for us.

FINANCIAL MANAGEMENT

We have also made great improvements in our systems, including bringing critical new systems online. We have installed and are using a new core financial management system that dramatically improves the Corporation's financial accountability.

All documents in the National Service Trust have been digitally imaged and filed, making it easy, fast and accurate to retrieve records.

AmeriCorps grantees are now submitting information on enrollment, service hours and term completion through a secure web-based system. We have worked extremely hard, taken on big challenges and made major progress.

FISCAL YEAR 1999 AUDIT

The Inspector General's recently released audit report for fiscal year 1999 reflects some of this progress. The number of material weaknesses, as you pointed out, is reduced from eight to five. And the auditor issued a clean opinion on the Corporation's statement of financial position. And we still have much to do.

As this is the last annual audit during my tenure at the Corporation, I wish we had made it the final mile to full auditability. The Inspector General wrote that reducing the number of material weaknesses and implementing the new accounting system indicate that the Corporation continues to make progress toward producing auditable financial reports.

So while the outcome of the audit is not all that we had worked to achieve, it is now apparent that our goal of full auditability is within sight.

We will continue to focus our attention, resources and energy to complete this job. And we are requesting an increase in program administration funds to support that effort.

On the program front, National Service is stronger, more vital and more effective. That is why I am pleased to present the President's request to expand the opportunities for Americans to engage in service because it works, is working, and is recognized around the country as meeting critical needs of our communities and of our young people.

LEARN AND SERVE AMERICA

Through Learn and Serve America, young people in school are being challenged to take personal responsibility for the needs of their communities. Service-Learning is taking root in schools throughout the country. The evaluation shows that students who participate in Service-Learning improve their academic performance, develop problem-solving skills, and learn the habits of good citizenship.

AMERICORPS

In AmeriCorps over the past 5 years, communities across the country have experienced the power and the value of more than 150,000 AmeriCorps members getting things done, important things that the communities need.

The 5-year evaluation of AmeriCorps conducted by Aguirre International concluded that AmeriCorps prepares young Americans for the future, strengthens communities and helps build the civic sector by providing people-power to non-profit organizations.

We have worked to focus AmeriCorps and all of National Service on tackling big problems and achieving important goals. Three years ago, the Congress and the President agreed that the country should make literacy a top priority, which I know is a special interest of yours, Mr. Chairman.

AmeriCorps and our other service programs have taken this charge to heart. In fiscal year 2000, we will meet and exceed the committee's direction to devote at least $40 million to literacy projects.

DIGITAL DIVIDE

Similarly, taking Senator Mikulski's lead, AmeriCorps members will be on the front lines of closing the digital divide. New technologies have brought our country to a critical juncture. Either computers and the Internet will be a great instrument of new opportunity, or they will create an even great chasm between the haves and have-nots in our society.

AmeriCorps and National Service will be powerful tools to help transform the digital divide we see today into the digital empowerment we seek.

AmeriCorps has supported several successful technology projects in the past with private sector partners, and now Senator Mikulski has proposed this new E-Corps within AmeriCorps. The President and Senator Mikulski announced just last week that AmeriCorps will make a start on E-Corps right away, and we look forward to working with the committee to make E-Corps a powerful reality.

CLOSING STATEMENT

Senator Bond and Senator Mikulski, this is the fifth and the last time that I will appear before this committee. I want to express my special thanks to you. The health of the Corporation and the strength of National Service have been greatly improved by the personal interest you and your staff have taken.

National Service is challenging citizens, especially young people, to take responsibility for something greater than their own self-interest, to become new patriots of the home front.

I believe more than ever today that National Service is at the vital center, not on any ideological spectrum, but at the core of what we need to do to make the promise of America a reality for all Americans.

Thank you.

[The statement follows:]

PREPARED STATEMENT OF HARRIS WOFFORD

INTRODUCTION

Mr. Chairman, Ranking Member Mikulski, and members of the Subcommittee, I appreciate this opportunity to present to you the Administration's fiscal year 2001 budget request for the Corporation for National Service and the national service programs that you fund: AmeriCorps, including the National Civilian Community Corps, and the service-learning program for students—Learn and Serve America.

These programs have helped to reinvigorate the long American tradition of service to community.

AmeriCorps members continue to provide valuable and important service to our country. This past year we celebrated those accomplishments on the occasion of AmeriCorps' Fifth Anniversary. One way we marked the Anniversary was to select 21 All AmeriCorps Award winners—AmeriCorps members whose exemplary service received special recognition at a White House ceremony. They were introduced and saluted by Sargent Shriver, General Colin Powell, Governor Michael Leavitt, Coretta Scott King, and President Clinton.

In at least 44 states and the District of Columbia, AmeriCorps members, state and local officials, and friends marked the Fifth Anniversary with Kick-Off and Swearing-In ceremonies. The Anniversary was planned in conjunction with Make A Difference Day, the nation's largest service day, in which thousands of AmeriCorps members and students in service-learning projects participated.

Mr. Chairman, five years ago when the legislation establishing the Corporation was passed, there were many questions: Would the combination of eight different federally-supported service programs work? The new Corporation for National Service, as you know, combined three long-serving senior service programs—Foster Grandparents, Senior Corps, and the Retired and Senior Volunteer program (RSVP)—with the Volunteers in Service to America (VISTA), the first domestic Peace Corps, now 35 years old; the service-learning program and the grant programs for youth service of the Commission on National Service, authorized by the National Service Act of 1990; the National Civilian Community Corps which was established by Congress in 1992; and on top of this Congress added the larger new national service program to be called AmeriCorps. The question was whether this combination would work to the benefit of American communities—and to the benefit of young and older Americans who want opportunities to serve their country.

As to the new venture—AmeriCorps—the questions were also numerous: Would it be effective in getting important things done? Would AmeriCorps support—and not in any way undermine—the large and small non-profit institutions of the service sector and the volunteer spirit in our country? Would AmeriCorps' decentralized system, designed to rely on newly-created, governor-appointed state commissions to deliver service opportunities, work? And would the experience of giving back through service to their communities prove beneficial to young people in AmeriCorps, giving them marketable skills, assisting them with paying for college, and making them better citizens?

Mr. Chairman, the work of the Corporation, and the work of now more than 150,000 AmeriCorps members, half a million senior citizens, and more than a million students in service-learning programs assisted by the Corporation has answered each of these questions with a strong Yes.

I am attaching the statement of sixty nonprofit organizations comprising the National & Community Service Coalition, including the American Red Cross, Big Brothers/Big Sisters of America, the Catholic Network of Volunteer Service, the Girl Scouts of the USA, and the YMCA of the USA. This is what they say about the Corporation's service programs:

"[W]e have seen firsthand how the federal investment has spurred the growth of service opportunities and mobilized hundreds of thousands of school-aged children, young adults and senior citizens to tackle an array of our nation's educational, social and environmental needs. They have contributed to the safety and well being of our must vulnerable citizens, the improvement of reading skills among young children, the protection of our endangered natural resources, the construction and renovation of homes for low-income families, and the restoration of individual neighborhoods and communities across the country.

"Federal funds constitute a small, but strategic, portion of the total resources which support national service. Moreover, the vast majority of federal funds pass straight through to State Commissions which, in turn, award grants to locally-controlled programs on a competitive basis that emphasize both quality and cost effectiveness. Finally, the federal government's involvement in national service builds on the nation's well-established tradition of volunteerism and on decades of painstaking development by grass-roots service programs—both of which have long enjoyed nonpartisan support from elected officials at every level of government.

"It is important to note that the sheer reality of federal legislation and leadership has brought heightened visibility, as well as new state, local and private resources to the service movement." [emphasis in original]

These are not just generalities. The results, for example, in terms of the construction and renovation of homes for low-income families have been extraordinary. Habitat for Humanity reports that it has built 1,372 Habitat houses as the result of

AmeriCorps and counts over 177,000 Habitat volunteers who have been supervised by AmeriCorps members. I attach the statement of Tom Jones of Habitat for Humanity given recently at a congressional briefing. I also attach the summary of an independent study by Aguirre International on the cost effectiveness of AmeriCorps service, its benefits to communities, and the personal gains for members resulting from AmeriCorps service.

Mr. Chairman, AmeriCorps has affirmed what we already knew—that the answer to America's biggest problems lies in the energy, idealism, and personal responsibility of Americans.

BUDGET REQUEST SUMMARY

The total fiscal year 2001 budget request for the Corporation's programs in this Subcommittee's jurisdiction is $533.7 million, an increase of $100.6 million above fiscal year 2000. This increase will continue the Corporation's progress toward reaching the President's goal of having 100,000 new AmeriCorps members by the year 2004. This budget request will support 62,000 AmeriCorps members in fiscal year 2001, including 1,100 National Civilian Community Corps (NCCC) members. The request includes a $79.6 million contribution to the National Service Trust to provide for the educational awards to AmeriCorps members upon completion of their service. The Office of the Inspector General is requesting a separate appropriation of $5 million to support the functions of that organization, a $1 million increase over fiscal year 2000.

The request also includes $5 million to establish an important new effort—the AmeriCorps Reserves program. This pilot program will be modeled on the military reserves: former AmeriCorps members would serve in the Reserve Corps on weekends and/or after work or on vacations, and would work on critical national problems such as the need for rapid response to natural disasters. The Reserves program will enable former AmeriCorps members to re-engage in continuing special service to their communities, particularly in times of crisis. The Reserves will build on the AmeriCorps Continuing Service initiative, which connects AmeriCorps alumni to community service projects through a partnership with national non-profit organizations such as the American Red Cross, the Boys and Girls Club, Big Brothers/Big Sisters, Habitat for Humanity, the National Mentoring Partnership, and the YMCA.

The budget request also provides an $8 million increase for the Learn and Serve America program. The total request for that program is $51 million. This funding will continue the growth of service-learning for students at all grade levels and those in college. The $8 million increase will support two new service-learning initiatives: $5 million in grants for a new Community Coaches program and $3 million for Youth Empowerment Grants.

The budget request would increase funding for Innovation, Demonstration and Assistance activities by $14 million to $42.5 million. The Corporation uses these funds to provide technical assistance to grantees and service programs, to assist programs in enrolling participants with disabilities and accommodating their participation, and to support innovative demonstration service programs that may not be eligible under other Corporation programs. This funding supports a significant portion of the Corporation's literacy activities, including a major literacy initiative in the District of Columbia and a part of America Reads funding designated by Congress, as well as the AmeriCorps Promise Fellows program.

As the members of the Subcommittee know, the Corporation for National Service has forged a very successful relationship with the Points of Light Foundation, an initiative established by President George Bush. The fiscal year 2001 budget request contains $7.5 million for the Points of Light Foundation to continue support at last year's level.

The fiscal year 2001 budget request also contains an additional $7.5 million to support America's Promise: The Alliance for Youth, led by General Colin Powell. That effort was launched by Presidents Clinton, Bush, Carter, Ford, and Mrs. Reagan representing her husband, at the Presidents' Summit for America's Future in Philadelphia. This new funding will enable America's Promise to continue and expand the work for children and youth started by all the living Presidents at Philadelphia, along with 38 Governors, more than a hundred mayors, and several thousand national and community civic leaders and organizations.

Like the Points of Light Foundation, America's Promise is a special agency for mobilizing community volunteering with the collaboration of the great organizations of the non-profit sector, large and small, of the business sector, and of government at all levels. Together, they are key parts of the system of community and national service.

The Corporation is seeking $35.6 million for program administration. This includes $3.6 million in additional funding for the state commissions and $4.1 million in program administration funding to continue the high priority management information that are needed at the Corporation. The commissions are largely responsible for the selection and oversight of AmeriCorps programs and members. In addition, we are requesting $5 million for program evaluation.

MANAGEMENT SYSTEMS IMPROVEMENT AND THE FISCAL YEAR 1999 AUDIT

Mr. Chairman, the future success of national service, the Corporation, and its programs will depend upon the effective management of the resources dedicated to these purposes. Since my last appearance before this Subcommittee the Corporation has taken aggressive action to improve its overall management.

We have given particular focus in the last year to remedying the material weaknesses in our financial management systems, as identified by the fiscal year 1998 audit. The Corporation developed an Action Plan not only to correct these weaknesses, but also to strengthen Corporation management generally, increase the use of technology, and improve our stewardship over Federal funds. The Action Plan is an effective tool for correcting problems and resolving issues, and reflects the Corporation's much improved general control environment.

When first developed for fiscal year 1999, the Action Plan had 8 Goals, 37 Objectives and 165 tasks. As the year progressed, we added additional tasks. As of March 21, 2000, we have completed 268 of 329 planned tasks, or over 80 percent.

The Corporation has made very substantial progress in critical management areas over the past 18 months. We have implemented new systems, successfully transitioned to the Year 2000 and brought on exceptionally talented people in key leadership positions at the Corporation. Specifically, the Corporation has—

—implemented a new financial management system that offers on-line, real-time data for management of the Corporation's resources;
—selected and confirmed an exceptionally well-qualified Chief Financial Officer, selected a Deputy Chief Financial Officer and a Chief Information Officer;
—hired new staff with strong financial management qualifications;
—within the National Service Trust, installed a new imaging system to electronically capture all of the historical Trust records and to digitally scan all new forms submitted to the Trust. This system has improved data reliability, addressed past audit issues, and reduced the labor needed for the management of the Trust;
—implemented a new Web Based Reporting System for AmeriCorps grantees to enroll, monitor and certify AmeriCorps member service;
—transitioned to the Year 2000 without mishap;
—issued seventeen new policies that provide clear management guidance in areas such as procurement, audit resolution, debt collection, and network and computer security;
—provided extensive training to staff to improve their skills and knowledge in areas such as procurement, grants management, grant monitoring, EEO compliance, finance, and appropriations law;
—established and staffed Executive Offices in the program areas to improve administrative controls;
—implemented a management control program;
—strengthened the performance management system; and
—increased oversight of grantees.

These are considerable accomplishments the results of which are reflected in the recently released fiscal year 1999 audit. Mr. Chairman, as you know last year auditors from KPMG, under contract to the Corporation's Inspector General, gave an unqualified opinion on the Corporation's balance sheet, or statement of financial position for fiscal year 1998, with disclaimers on the statements of operations and cash flow. They also identified eight material weaknesses in the Corporation's financial and other management systems.

This year, the audit found that the material weaknesses had been reduced from eight to five and again, the Corporation received an unqualified opinion on its balance sheet, and disclaimers on the other two related statements. In submitting the new audit the Inspector General stated that, "These improvements, and the Corporation's new accounting system implemented during the final months of fiscal year 1999, indicate that the Corporation continues to make progress toward producing auditable financial reports." The Inspector General also pointed out that "the Corporation has yet to fully correct all its financial management deficiencies."

We had hoped to receive unqualified opinions on all or our statements. However, the transition to the brand new financial management system, as the auditors

noted, was arduous. We succeeded, before the end of the fiscal year, in making the new system fully operational, but for most of the year we had to draw information from the long-established, but very inadequate former system. We will reap the great benefits of the new system in fiscal year 2000 and beyond. Meanwhile, the decrease in material weaknesses shows that our management improvements are working. We maintained the same opinion on our statements in a year when we implemented a brand new financial management system. This was a major effort for the Corporation and one that will reap benefits in fiscal year 2000 and beyond.

The major initiatives that have brought about this improvement are described below.

Implementation of the New Financial Management System

The Corporation implemented the new financial management system in September of 1999. The "Momentum" system is Year 2000 compliant, conforms to Federal system standards, and uses the federal government's standard general ledger. The system provides real-time, on-line access to data and it has front-end edit checks. Funds control is an integral part of the new system. Data integrity is much improved, and Corporation staff has access to critical management and reporting information.

The system implementation was difficult for us, as it has been for other federal agencies. The Corporation was moving from a non-standard to a standard system. Configuring the new system and converting data from the old system to the new system was a significant effort. We recruited new staff in Accounting with the skills needed to accomplish this goal, who worked long and hard hours to successfully implement the system without any break in meeting our financial obligations to grantees or participants.

Management Team in Place

The Corporation has taken its management responsibilities seriously. Wendy Zenker, our Chief Operating Officer, and the rest of the management team have worked diligently to improve the Corporation's operations.

The President nominated Anthony Musick as Chief Financial Officer in July and the Senate confirmed him in November of last year. His expertise and experience have provided important leadership in our determined efforts to improve financial management systems.

In addition, we recently named William Anderson as Deputy Chief Financial Officer. Mr. Anderson served in the Corporation's Inspector General's Office as the Assistant Inspector General for auditing. His experience will be a great asset to the Corporation. We have also hired additional staff in accounting, including an individual responsible for producing the Corporation's financial statements who reports directly to the CFO and Deputy CFO.

We also recently appointed David Spevacek as the Corporation's Chief Information Officer, another key position in our management team. He had previously served as our Director of Budget and the National Service Trust and has wide knowledge of the Corporation.

Management Controls

We have issued a number of new policies and procedures to make the Corporation operate more effectively in areas ranging from procurement, debt collection, audit resolution, property management, computer security, to Internet use. Seventeen policies have been issued. These administrative policies complement the programmatic policies that are already in place.

As we have developed our policies and procedures we have paid particular attention to our audit resolution processes. The Corporation maintains detailed reports on open and closed audit recommendations. As of March 31, 2000, the Corporation had completed final action on 181 of the 212 financial audit recommendations made by the Inspector General.

The Corporation has developed State Administrative Standards to guide state commissions in the administration of their grants. The Standards will enable the Corporation to apply consistent criteria to the assessment of state commission operations and to make well-informed decisions about funding. The Standards will enable commissions to pinpoint and diagnose their technical assistance needs. Once needs are clearly defined, commissions will improve their foundational systems, creating reliable infrastructure for the future of national service.

Technology

We have made improvements to the National Service Trust and have provided Internet access to each employee's desktop. Our transition to the year 2000 occurred smoothly for our widely dispersed field and headquarters staff.

Significant technology initiatives that were accomplished in fiscal year 1999 include the installation of an imaging system in the National Service Trust and the implementation of a web-based reporting system to record AmeriCorps member service. All existing Trust file documents have been captured electronically, and all official forms (enrollment, end-of-term, and other forms) are being imaged and retrieved electronically. This greatly improves the Corporation's ability to get access to historical records and speeds up the processing of newly received documentation. The system allows for the electronic storage and retrieval of almost one million pieces of paper filed with the Trust since the beginning of AmeriCorps.

The Web-Based Reporting System (WBRS) for AmeriCorps member service was pilot tested in 10 states in 1999 and is now being implemented in all 50 States, 32 National Direct grantees, and 15 Education Awards programs. State Commissions and National Direct grantees are using this secure Internet server to record enrollments, member hours served, and education awards earned. WBRS is greatly improving the quality of the data received by the Corporation and the speed at which the Corporation can process that data.

Mr. Chairman, these changes did not happen overnight. There were no quick fixes to longstanding problems, many going back to the systems used for years by the Corporation predecessor agencies before the Corporation was created. We have been working to develop lasting solutions to the financial and management problems the Corporation has faced. Our efforts to implement systemic improvements are recognized by the fact that the auditors' financial statement report reduced the number of material weaknesses from eight to five.

The Corporation is committed to continuing these improvements. The President's Budget requests $35.6 million for the Corporation's program administration in fiscal year 2001, an additional $7.7 million over fiscal year 2000. Of this increase, $4.1 million will go to the Corporation's management. These funds will continue the critical financial management and other management improvements needed to make the Corporation operate in a more efficient and effective manner. The additional funds will support system development projects, such as the grants system; other technology improvements, such as increased use of the web; and critical staff needs to support the growing Corporation workload.

The increase includes $3.6 million for State Commission administrative requirements. Reviews and other reports, such as pre-audit surveys now being performed by the Corporation's Inspector General, indicate that State Commissions require additional support to fully perform the responsibilities entrusted to them under the National and Community Service Act.

Cutting Per Member Costs

In addition to the management improvements, the General Accounting Office has found that pursuant to a 1996 agreement with Congress, the Corporation has reduced its average budgeted cost per member to no more than $15,000 in the AmeriCorps*State/National program. We set ceilings on average budgeted costs for grants to state commissions and national non-profits, as well as implemented other cost cutting measures such as raising the program matching fund requirements for grantees. In addition, we expanded the Education Awards program under which the Corporation provides only the AmeriCorps education award and a minimal amount (less than $500) of program support. The local nonprofits cover any other costs including living allowances. The Education Awards program is a major way of reducing the Corporation's costs while increasing support from the private and independent sectors.

AMERICORPS PROGRAMS FISCAL YEAR 2001 BUDGET REQUESTS

*AmeriCorps*State/National*

Last October, AmeriCorps celebrated its Fifth Anniversary. Since the beginning of the program, more than 150,000 people have joined AmeriCorps. For fiscal year 2001, the Administration is requesting a total of $284 million for AmeriCorps grants. Of this total, $233 million will fund grants to state commissions under the AmeriCorps*State program and $51 million will go to our National Direct grantees. The overall request will support a total of 62,000 AmeriCorps members, 12,000 more than in fiscal year 2000, and will keep AmeriCorps on track to reach 100,000 members annually by the year 2004.

Under the AmeriCorps*State grant program, AmeriCorps members participate in local service programs operated by nonprofit agencies, local and state government entities, Indian tribes, institutions of higher education, local school and police districts, and partnerships among any of the above. Member recruitment, selection, and placement are the responsibility of the grantees. Members serving with these

grantees must help communities meet their educational, public safety, environmental, and other human needs. Governor-appointed state commissions select the local non-profits and community organizations that will provide service to communities with the AmeriCorps members. The $233 million request is a $44 million increase over fiscal year 2000.

AmeriCorps*National Direct program grantees are national nonprofit service organizations that operate in a number of states such as Habitat for Humanity, the American Red Cross, and the Boys and Girls Clubs. The Corporation has 39 National Direct grantees.

The National Direct program is an efficient and effective use of Corporation funding. These national and multi-state organizations have expertise and successful track records in administering service initiatives. They also have great success in meeting one of the goals of national service—increasing the spirit of volunteering in America. For example, AmeriCorps members with Habitat for Humanity supervised over 177,000 volunteers. We attach a 1999 article by Habitat's founder, Millard Fuller, "Habitat, AmeriCorps good partners," in which he states:

"This year, more than 500 AmeriCorps members are wielding hammers and recruiting more volunteers for Habitat for Humanity. . .

"That's where AmeriCorps has played such a vital role. AmeriCorps members help train local people in basic construction skills. They are there, day in and day out, supervising and directing the part-time efforts of others.

"The continuity, leadership and knowledge that AmeriCorps members provide allow us to increase both the number of volunteers we are able to mobilize effectively and the overall productivity of our efforts."

Despite the service opportunities these national and multi-state grantees provide, their expertise in managing large-scale service projects, and the advantages of using such non-profit organizations to fulfill the goals of AmeriCorps, Congress has capped the National Direct program at $40 million for several years. In fiscal year 2000, Congress appropriated $45 million for the National Direct program of which $5 million was intended to support a teen anti-violence initiative of the Girl Scouts of America.

For fiscal year 2001 we are requesting $51 million for the National Direct program. The modest increase in funding for this element of AmeriCorps will produce real benefits by increasing the service opportunities these national non-profits will create. We hope the Subcommittee will agree to lift the cap on the National Direct program.

*AmeriCorps*Education Awards Program*

In accordance with an agreement with Members of Congress to reduce the Corporation's average budgeted cost-per-member, and to increase the number of AmeriCorps members, the Corporation established the Education Awards Program three years ago. This initiative provides education awards to national, state, and local community service organizations that can support most or all of the costs associated with AmeriCorps members from sources other than the Corporation. AmeriCorps members serving in these projects are eligible to receive education awards, but do not receive federally-supported living allowances paid by the Corporation. In fiscal year 2000, the Corporation anticipates allocating approximately 13,000 education awards under this program. Under the President's budget proposal, this allocation will be expanded in fiscal year 2001 to about 15,000.

The Education Awards program has proven to be attractive to grantees and relatively uncomplicated to administer. During the first three years of the Education Awards program, AmeriCorps approved more than 175 new grants, creating opportunities for approximately 35,000 new AmeriCorps members. The program has been one of the Corporation's most successful innovations, extending the number of organizations participating in AmeriCorps and increasing the number of AmeriCorps members, while at the same time lowering the Corporation's per member costs.

*AmeriCorps*NCCC*

The National Civilian Community Corps (NCCC) is unique among the various streams of AmeriCorps service. It is a 10-month residential program run directly by the Corporation. Unlike the State and National Direct grant programs, the Corporation administers all aspects of NCCC. NCCC members receive a $4,000 annual living allowance, room and board, and they receive an education award upon the successful completion of their service.

The NCCC was approved by Congress and President Bush in 1992, before AmeriCorps. The key sponsors included Senators Boren, Dole, Warner, McCain, Mikulski, Spector, Seymour, Simon, Nunn, and Wofford. The following year, the Na-

tional and Community Service Act of 1993 placed the administration of the NCCC in the Corporation for National Service.

NCCC members are housed at five campuses serving regions across the United States. In three locations, the campuses occupy closed or downsized military bases: the Southeast Region at the Charleston Naval Training Center, Charleston, South Carolina; the Central Region at Lowry Airforce Base, Denver; and the Western Region at the San Diego Naval Training Center. The campus in the Northeast Region is located at a medical facility for veterans in Perry Point, Maryland, and the Capital Region campus is at a municipal facility in Southeast Washington, D.C.

AmeriCorps*NCCC members serve in local communities and, in the tradition of the Civilian Conservation Corps of the 1930s, are frequently deployed on "spikes" to perform critical service projects. They tutor children, rehabilitate public schools and public housing in urban areas, help Habitat for Humanity organize "blitz builds," and provide assistance in daily living activities to low-income residents at nursing homes.

All NCCC members receive special training in disaster relief and are rapidly deployed to assist the Federal Emergency Management Agency and the Red Cross in national disasters. Members have served in 45 disasters since 1994, giving direct help to victims and organizing community volunteers to help. In the 1998–1999 program year, NCCC members assisted 83,000 people in disaster areas; served 40,500 meals to disaster victims; and distributed 780,000 pounds of clothing to disaster victims. They played a crucial role in providing relief to the flood victims in North Carolina.

Funding for NCCC was originally set in 1994 at $30 million (including $20 million in an earmarked Department of Defense appropriation). The 1995 appropriation was reduced in a rescission from $26 million to $18 million, and funding has been held at that level ever since. This funding cap has limited the number of people who can join NCCC. Positions in the NCCC are in high demand, but the opportunities are restricted by this out-of-date ceiling. Last year, the NCCC received 3,430 applications for some 850 slots.

Further, because of the limit on funding, the NCCC will only be able to provide approximately one half of the teams sought by the Boys & Girls Clubs for major club renovation efforts this year. FEMA and the Red Cross sought four teams for every one that could be provided for the relief of flood victims in North Carolina. Similar requests have been made for other natural disasters. Our campuses also report that they have had to curtail projects requested by local educational institutions, food banks, environmental organizations, state and local parks, and other non-profit organizations. As a result of the $18 million cap, fewer young people have the chance to serve in NCCC and fewer communities are being served.

To allow NCCC to meet the demand for its teams, the fiscal year 2001 budget requests $3 million in additional funding for this program. That will support 1,100 members, an increase of 230 NCCC members nationwide.

Special AmeriCorps Initiatives

AmeriCorps Promise Fellows.—This is our major joint initiative with General Colin Powell's America's Promise—the Alliance for Youth, the national mobilization for youth launched by Presidents Clinton, Bush, Carter, Ford, and Mrs. Reagan representing her husband, at the Presidents' Summit for America's Future. It is led by General Colin Powell and supported by Governors, Mayors, and coalitions of nonprofits and civic leaders across the country. The five promises for youth declared at the Presidents' summit are: (1) an ongoing relationship with a caring adult—parent, mentor, tutor or coach; (2) a safe place with structured activities during non-school hours; (3) a healthy start; (4) an effective education that yields marketable skills; and (5) an opportunity to give back to their communities through service.

AmeriCorps Promise Fellows are a special leadership cadre of talented AmeriCorps members dedicated to helping communities fulfill these five promises. They do not serve with the national America's Promise organization, but serve with and are selected and administered by national, state, and local non-profit organizations that are developing and coordinating large-scale activities intended to support children and youth. There will be more than 500 Promise Fellows nationwide in the 1999–2000 program year. In an August 9, 1999 op-ed piece in the Jackson, Miss. Clarion-Ledger, General Powell said that AmeriCorps Promise Fellows "are an investment in young people, for the purpose of helping other young people, that promises to pay unlimited returns to our nation in the century ahead."

Indian Country Initiative.—In fiscal year 2001, the Corporation will replicate successful residential service program models in Indian Country by establishing up to three residential service corps on Indian reservations. Designed and operated by In-

dian tribes, these programs will provide up to 150 Native youth ages 18–25 with the opportunity to serve each year.

LEARN AND SERVE AMERICA

Learn and Serve America supports service-learning programs in schools and community organizations that engage youth in meeting education, public safety, environmental, and other human needs. The goal of Learn and Serve America is to make service an integral part of the education and life experiences of young people, thereby building a lifelong ethic of responsibility and service. Learn and Serve America programs integrate community service with academic curriculum or with out-of-school time and extracurricular learning opportunities.

Learn and Serve America makes grants to state government entities, Indian tribes, U.S. territories, and national nonprofit organizations. They in turn make subgrants for local service-learning projects. In addition, Learn and Serve America provides grants directly to institutions of higher education. State education agencies receive funds from Learn and Serve through a population-based formula. Nonprofit organizations, State Commissions, Indian tribes, U.S. territories, and institutions of higher education receive funds through a national competitive process, which includes set-aside funding for Indian tribes. All school and community-based grantees must demonstrate an increasing level of matching funds to qualify for continued federal support. Higher education grantees must provide a dollar-for-dollar match from the first day of the grant.

Funding for Learn and Serve has been held steady at $43 million since fiscal year 1996. In the intervening years, service-learning has gained stature and importance in education at the elementary, secondary and post-secondary levels because of its demonstrated positive impact on academic achievement, school engagement, civic responsibility, and understanding of racial diversity. I attach a summary of the findings of numerous studies that show that service-learning has a positive affect on students' engagement in school and helps students acquire academic skills and knowledge. The research finds that students who participate in service-learning are less likely to engage in risk behaviors and that service-learning benefits communities.

Community Coaches and Youth Empowerment Grants

For fiscal year 2001 the Corporation is requesting an $8 million increase over the fiscal year 2000 funding level for the Learn and Serve America program. This modest increase will fund two new investments in community youth service: $5 million for the Community Coaches program and $3 million for Youth Empowerment grants.

The funds sought in this budget request are to enable a Community Coach to serve in and estimated 1,000 schools across the country. Community Coaches will be teachers, counselors, and others, including in some cases AmeriCorps members, who can help students make the most of their service to the community and can act as a vital link between the school, the business sector, and the local community. These Community Coaches will help teachers and other school personnel to identify and to use the resources of their surrounding community to engage children in community service connected to their schoolwork. They will also work with individuals, organizations, and businesses in the community to encourage them to offer resources to the schools and to see the schools and students themselves as community resources. The Community Coaches initiative is based upon model programs pioneered by Do Something, a national non-profit organization for youth leadership.

The Youth Empowerment Grants will be competitive fellowships that reward young social entrepreneurs dedicated to solving problems in their communities. The Corporation for National Service will make grant funds available to community-based organizations that sponsor young people who have designed and developed their own projects. These will include efforts to prevent youth violence, programs to improve civic participation, and initiatives that engage older students in tutoring and mentoring.

The President's Student Service Scholarships

The President's Student Service Scholarships for high school students who have given outstanding community service are now in their third year. Scholarships have been awarded to over 7,000 young people to date, but many more students are eligible and deserving. In fiscal year 2000, each high school in the country is being offered an opportunity to select a junior and a senior to receive the $1,000 scholarships. Through the National Service Trust, the Corporation for National Service provides $500, which is matched with $500 from local scholarship sponsors such as civic organizations. Sponsoring organizations include Boys and Girl Clubs, Rotary,

Kiwanis, local PTA's, faith-based organizations, and local businesses. For fiscal year 2001, we propose using $7.5 million for up to 15,000 scholarships.

SPECIAL INITIATIVES AND PROGRAMS

Literacy Programs

We are grateful to you, Mr. Chairman, for your support of the Corporation's literacy efforts and your leadership in Congress on this issue. In its Report on the fiscal year 2000 budget, the Senate asked the Corporation to provide $40 million in assistance to literacy initiatives. The Corporation is currently in the process of awarding grants with fiscal year 2000 appropriations for the 2000–2001 program year. We will report on the use of these funds when the grant award process has been completed.

While the grant award process for the 2000–2001 program year has not been completed, based on our prior experience I fully expect the Corporation to exceed $40 million in literacy assistance. In November 1999, Abt Associates, under contract to the Corporation, completed an independent descriptive study of AmeriCorps Literacy Programs: State and National. The objectives of the study were to: describe AmeriCorps*State/National programs that conduct educational activities in terms of their programmatic structures and the literacy and tutoring activities they have implemented; identify programs using effective reading/literacy instructional models likely to improve children's reading abilities; and describe the target population receiving services.

The study documented a substantial level of literacy activity. In 1998–99, AmeriCorps*State/National programs engaged more than 10,000 members, involving 40,000 volunteers, to provide literacy services to over 260,000 individuals, 90 percent of whom are children. The following details were noted concerning AmeriCorps*State/National programs:

—Slightly more than half of all programs (54 percent) are involved in education.
—Thirty-seven percent of all programs provide direct tutoring in reading.
—Forty-two percent of all programs provide literacy services.
—Most AmeriCorps*State/National literacy programs are sponsored by community-based organizations (61 percent) or educational institutions (29 percent).
—Almost three-quarters of AmeriCorps*State/National literacy programs have been operating for two or more years. Almost half have received State/National grants since AmeriCorps' first year of implementation, 1994–95.

By extrapolation from these data, programs providing literacy services received more than $97 million from the AmeriCorps State/National program in 1998–99, although some of these projects provided more than literacy services. This level of support far exceeds the requested level sought in the Senate Report.

The Abt Associates Study also contained findings relevant to best practices in literacy programs:

—Almost all literacy programs provide some training to members and volunteers in literacy instruction and in working with children. Typically, about 16 hours of training are provided before and 20 hours are provided during the delivery of literacy services. Training is provided by a combination of staff from the sponsoring agency, the AmeriCorps program, the school district, and/or outside experts.
—Three-quarters of the programs conduct formal evaluations to assess the effectiveness of their literacy activities.
—Over half of the tutoring programs report that tutors conduct decoding activities with students (i.e., activities that help beginning readers develop sound-symbol correspondences).
—Most of the tutoring programs incorporate some of the structural and instructional features perceived by educators and researchers as important for positive reading outcomes. The features reported most frequently include:
  —Coordination of tutoring activities with the classroom curriculum;
  —Adequate intensity of tutoring activities-meeting at least twice weekly for at least 1.5 hours/week; and
  —Provision of training to members and volunteer tutors before and during service delivery in two important content areas: (1) reading and tutoring children; and (2) child development.
—Almost half of the tutoring programs use well-known, widely-used instructional models (e.g., Reading Recovery, Reading One-to-One, Success for All).

Abt Associates is also conducting a study to measure the outcomes of these literacy and reading efforts. That survey should be completed in the fall. We have conducted studies of other education and literacy programs. First, a study of tutoring in 16 District of Columbia schools concluded that tutored students made significant

gains on a number of measures in reading performance and demonstrated greater gains on standardized achievement tests than did non-tutored students. A second study of the Corporation's senior demonstration programs, which are not funded by this Subcommittee, found similar positive results in reading scores, with many students showing dramatic improvements.

In addition, we have data on some successful outcomes in individual programs:

—*Washington Reading Corps*.—In the first year of operation of this State of Washington initiative launched by Governor Locke, some 20,000 students at 196 elementary schools statewide received 425,000 hours of tutoring help from AmeriCorps members. The number of fourth-graders who met the state reading standard rose 11 percent at the schools with AmeriCorps tutors, compared to 6 percent statewide.

—*Greensboro Elementary School, Gadsden Co., Florida*.—As part of the Gadsden Reads program, AmeriCorps members have worked with students identified as being behind their grade levels in reading by 1½ grade levels or more. Since the Spring of 1997, 198 elementary students who have participated in the program on average are barely half a grade level behind norms. Students who have been with the program for its full two years have improved their reading an average of nearly four grade levels.

In addition to these impressive findings, we have previously testified about the successes for the Reading One-to-One program participants in Texas. Researchers have found documented gains of 0.4 to 0.7 grade equivalents above what students would have attained without tutoring, a significant improvement. The program uses college students, AmeriCorps members, and community residents to tutor more than 6,000 students in more than 70 schools across ten school districts in Texas.

Mr. Chairman, we will continue to work with you on emphasizing the importance of literacy in America through our service programs.

Digital Divide

Another special initiative in which many Members of Congress have shown a keen interest is closing the digital divide. Senator Mikulski is our special mentor in this area. She is a leader in recognizing that like literacy, the digital divide between the haves and have-nots in technology means that many Americans are unable to use the nation's abundant information resources. We are delighted by Senator Mikulski's proposal for an "E-Corps," an effort to bring the needed "people-power" of AmeriCorps members to close the digital divide.

President Clinton recently announced a special "down payment" on the E-Corps that has two parts. AmeriCorps will hold a special competition for $10 million in grants for projects specifically designed to help spread technology access and skills to those who might not otherwise have opportunities. Learn and Serve America is also making $2.5 million in grant funds available for service-learning projects devoted to bridging the digital divide. This investment of existing resources is a step toward making Senator Mikulski's vision of an E-Corps a powerful reality.

The private sector is also engaged in supporting the E-Corps initiative. The President also announced that the Yahoo!, the Internet portal, has pledged up to $1 million in on-line public service announcements concerning our efforts to bridge the digital divide and to help recruit AmeriCorps members to serve in technology-related projects.

Several AmeriCorps programs are already directly involved in efforts to close the digital divide at the national and local levels. AmeriCorps members are wiring schools to the Internet, training teachers on how to use technology in the classroom, and providing one-on-one instruction to children and adult learners. Here are a few examples receiving funding through this Subcommittee:

—*Project FIRST*.—Under this initiative of the Public Education Network, one of our National Direct Grantees, AmeriCorps members are refurbishing and installing computers and other components in schools. They are assisting educators, students and adult learners in using the technology. Project FIRST achieves its objectives through a partnership with IBM.

—*A STAR*.—This program, located in Western Maryland, is using the world-wide-web to enhance after-school programming.

—*Lyndon State College, Vt.*.—AmeriCorps members operate resource centers that provide residents of rural Vermont with computer resources, educational material, and courses on adult literacy and parenting skills.

—*City Year, Cleveland*.—In partnership with the West Side Community Computer Center and the Salvation Army Computer Center, AmeriCorps members are developing and implementing an out of school computer program curriculum for children in Kindergarten through Grade 5.

The NCCC is working in schools, YMCAs, and Boys & Girls Clubs across the country performing a number of tasks in support of bridging the digital divide, and complimenting the PowerUp program. This includes assisting in the wiring and setup of sites for computer use, installing computer labs, teaching students and low income adults how to use computers, introducing computers into schools, familiarizing teachers with computers, and tutoring students in other subjects with computers.

Most of the Corporation's streams of service are involved in efforts to bridge the digital divide. Outside of this Subcommittee, AmeriCorps*VISTA also has an outstanding group of national and local projects focusing on this issue including PowerUP. PowerUP is a partnership with America's Promise, AOL, the YMCA, Boys and Girls Clubs, and other organizations, that will deploy up to 400 AmeriCorps*VISTA members in community technology centers around the country. AOL, Gateway, Sun Microsystems and other corporate partners have pledged more than $10 million in support to this effort. AmeriCorps*VISTA is funded through the Labor-HHS Subcommittee.

Service for America's Veterans

Many AmeriCorps members practice their patriotism on the home front by serving those men and women whose patriotism was demonstrated through service in the armed forces. Mr. Chairman, you have been recognized for your leadership on Veterans issues, particularly the needs of homeless veterans.

One of the most important initiatives that the Corporation funds through our National Direct grant program is the U.S. Veterans program, formerly the Los Angeles Veterans Initiative. U.S. Vets has a $1.1 million grant supporting the service of more than 100 AmeriCorps members, many of them formerly homeless veterans themselves, in three cities: Los Angeles, Houston, and Washington, D.C. U.S. Vets works in partnership with property developers and managers, and human service agencies assisting homeless veterans to become self-sufficient. The program has reached more than 10,400 homeless veterans and provided more than half of those with referrals to shelters, treatment centers, transitional housing, as well as other necessary services.

In addition to U.S. Vets, the Navajo Nation Department of Navajo Veterans Affairs has 30 AmeriCorps members helping veterans and their families get access to quality care services. The members serve in five Veterans' Affairs offices across the Navajo nation, the largest reservation with territory in Utah, Arizona, and New Mexico.

As you know Mr. Chairman, many of our veterans are homeless. U.S. Vets have found that more than half of the homeless people they serve are veterans. The Corporation has numerous programs that assist homeless people. Programs such as the Catholic Network of Volunteer Service, an Education Awards program with over 1,000 AmeriCorps members, serves tens of thousands of homeless people, along with the other service of the AmeriCorps members.

Many local AmeriCorps programs and their members serve veterans in a wide range of ways, from more institutional settings such as working in VA hospitals or Veterans retirement homes, or in more informal ways such as serving senior citizens who are veterans. Many of the participants in our Senior Companion program, Foster Grandparents, and the Retired Seniors in Volunteer Program are veterans. The Corporation is currently reviewing grant applications for the 2000—2001 program year. We will report on the grants awarded to veterans programs for the coming year.

SUCCESSFUL COLLABORATIONS: THE POINTS OF LIGHT FOUNDATION AND AMERICA'S PROMISE

The Points of Light Foundation

In fiscal year 2001, the Corporation will continue its successful collaboration with the Points of Light Foundation. The budget request for the Foundation is sustained at last year's level of $7.5 million. The funding will be used by the Points of Light Foundation to carry out its fundamental purposes, as established by President Bush, endorsed by Congress, and continued with the support of President Clinton:

—Encouraging every American and every American institution to help solve the nation's most critical social problems by volunteering their time, energies, and services through community service projects and initiatives.

—Identifying successful and promising community service projects and initiatives with nonprofit organizations, corporations, families, and youth, and disseminating information concerning such projects and initiatives to other communities in order to promote their adoption nationwide.

—Building the capacity of institutions to support volunteer service, and developing individuals as leaders to serve as strong examples of a commitment to serving others and to convince all Americans that a successful life includes serving others.

The Points of Light Foundation supports a network of hundreds of Volunteer Centers nationwide. An increasing number of AmeriCorps members and AmeriCorps*VISTA members are working directly with, and under the leadership of, these centers for volunteer service. In fiscal year 2001, the Foundation will expand its efforts to build the capacity, visibility and sustainability of a unified nationwide network of local Volunteer Centers. The Points of Light Foundation is committed to working in close partnership with these local organizations in the implementation of its overall strategic plans. The result will be to build a strong, dependable "delivery system" that mobilizes volunteers and other resources to address local needs. Last year, with President Clinton's support, the award of daily Points of Light has resumed. These awards of recognition are made by the Foundation in cooperation with the Corporation for National Service and the Knights of Columbus.

America's Promise—the Alliance for Youth

The Corporation also works closely with America's Promise—the Alliance for Youth. This national mobilization for youth was established at the Presidents' Summit for America's Future convened by President Clinton and President Bush at Philadelphia in 1997, and chaired by General Colin Powell. The Corporation for National Service and the Points of Light Foundation were the two initiating and sponsoring organizations, joined by the United Way of America and other major service organizations. I attach the Declaration of Philadelphia with the five promises—or goals—for children and youth. Hundreds of organizations from all sectors of American life—nonprofit, volunteer, religious, business, and government—have made major commitments to the goals of America's Promise.

The fiscal year 2001 budget proposes a $7.5 million grant to America's Promise to help fulfill its mission. The grant will support operational costs of the national organization, as well as activities consistent with the mission described above. It is anticipated that that these funds will supplement other ongoing activities and contributions toward the goals and objectives of America's Promise.

EVALUATION

The budget requests $5 million for evaluation, continuing the fiscal year 2000 level. Evaluation remains a high priority for the Corporation, as we continue to measure the impact our programs are having across the country and identifying areas that require improvement. Since 1994, the emphasis of the evaluation effort has been to determine the impact of Corporation programs in achieving the goals set for the Corporation in the National and Community Service Act. A priority in fiscal years 2000 and 2001 is to support studies identified in our performance plan, as required by the Government Performance and Results Act.

We have completed a number of evaluations that show the value of national service to communities and to AmeriCorps members. An independent study by Aguirre International found that AmeriCorps service strengthens communities and nonprofit organizations, effectively prepares Americans for the future by improving job readiness skills, and that AmeriCorps provides $1.66 in benefits to communities for every dollar spent (See Attachment).

THE MARTIN LUTHER KING, JR. DAY OF SERVICE

This year, Americans across the country celebrated the King Holiday, honoring the life and work of Martin Luther King, Jr. For the past five years, the Corporation has sponsored the King Holiday day of service, pursuant to the mandate to the Corporation in the King Holiday and Service Act of 1994. The King Center for Nonviolent Social Change, the Points of Light Foundation, the United Way of America, Habitat for Humanity, Youth Service America, Best Buy Company, Do Something, and First Book were partners in the successful effort to make January 17, 2000 "a day on and not a day off." In consultation with the King Center, the Corporation provided grants to 137 public and non-profit organizations to assist in more than 300 service activities nationwide. Each year, the idea of service as the focus of the King holiday has been spreading; the community collaboration in doing this will grow further in 2001.

CONCLUSION

Mr. Chairman, this will probably be the last time in my current role that I appear before you. I have had the honor and privilege of working with the members of this

Subcommittee. And it has been a privilege and honor to work with some of the finest professionals I have ever known on the Corporation staff, on our Board of Directors, at the Points of Light Foundation, at America's Promise, in state and local governments, and in America's great nonprofit organizations. I have also had the special opportunity to meet countless AmeriCorps members, students in service-learning, and seniors in service to their communities across the country. They are the new patriots on the home front that our country needs.

Mr. Chairman, Americans can be proud of what national service has accomplished. They can also be proud of the dedicated, non-partisan organization that we have worked steadily, day-by-day to build. America is now positioned to make service to community a common expectation of all Americans. It has been a tremendous experience for me to serve in this enterprise. I look forward in the remaining months of this session to continuing our work together.

ATTACHMENT A

NATIONAL & COMMUNITY SERVICE COALITION

SUPPORT FOR REAUTHORIZATION OF NATIONAL SERVICE LEGISLATION

The undersigned members of the National and Community Service Coalition (Coalition) voice their strong support for reauthorization of the National and Community Service Act of 1990 and the Domestic Volunteer Service Act of 1973.

Established in 1994, the Coalition is a network of 80 national, state and local organization which share a commitment to ensuring that Americans of all ages and backgrounds can contribute their time and talent to the public good. The Coalition represents the breadth and diversity of an evolving service movement and included representatives from:

—Long-established voluntary organizations, such as Big Brothers/Big Sisters of America and Youth Service America;
—The growing network of K–12 school-based and community-based service learning programs, such as the National Youth Leadership Council;
—College and university-based service programs, such as Campus Compact;
—Senior volunteer programs, such as the National Association of Retired Senior Volunteer Program Directors and the National Association of Foster Grandparent Program Directors;
—Faith-based service organization, such as the Catholic Network of Volunteer Service; and
—An array of national, state and local organizations which engage AmeriCorps member, VISTA Volunteers and thousands of other citizens in full-time service programs, such as City Year, Service and Conservation Corps, and YouthBuild USA.

In recent years, we have seen firsthand how the federal investment has spurred the growth of service opportunities and mobilized hundreds of thousands of school-aged children, young adults and senior citizens to tackle an array of our nation's educational, social and environmental needs. They have contributed to the safety and well being of our most vulnerable citizens, the improvement of reading skills among young children, the protection of our endangered natural resources, the construction and renovation of homes for low-income families, and the restoration of individual neighborhoods and communities across the country.

Federal funds constitute a small, but strategic, portion of the total resources which support national service. Moreover, the vast majority of federal funds pass straight through to State Commissions which, in turn, award grants to locally-controlled programs on a competitive basis that emphasizes both quality and cost effectiveness. Finally, the federal government's involvement in national service builds on the nation's well established tradition of volunteerism and on decades of painstaking development by grass-roots service programs—both of which have long enjoyed nonpartisan support from elected officials at every level of government.

It is important to note that the sheer reality of federal legislation and leadership has brought heightened visibility, as well as a new state, local and private resources to the service movement. The Federal investment is reaping handsome dividends and should be continued.

Alliance for Catholic Education
American Association of Community Colleges
American Association of Retired Persons
American Red Cross
American Youth Foundation
American Youth Policy Forum
AmeriCorps Alums

Arkansas Commission on National Service
ASPIRA Association, Inc.
Association of Farmworker Opportunity Programs
Big Brothers/Big Sisters of America
California Commission on Improving Life through Service
California Department of Education
Campus Compact
Catholic Network of Volunteer Service
City Year
Connecticut Commission on National and Community Service
Constitutional Rights Foundation
Earth Force
East Coast Migrant Head Start Project
Florida's Office of Collegiate Volunteerism
Georgetown University—Volunteer & Public Service Center
Girl Scouts of the USA
Kentucky Department of Education
Literacy Volunteers of America
Louisville Youth Alliance
Maine Commission on Community Service
Maryland Governor's Commission on Service
Maryland Student Service Alliance
Massachusetts Campus Compact
Mid-Atlantic Network of Youth and Family Services
Minnesota Commission on National and Community Service
National Association on Foster Grandparent Program Director
National Association of Independent Colleges and Universities
National Association for Public Interest Law
National Association of RSVP Directors
National Association of Senior Companion Directors
National Association of Service and Conservation Corps
National Crime Prevention Council
National School & Community Corps
National Society for Experimental Education
National Youth Leadership Council
Notre Dame Mission Volunteers, Inc.
Pennsylvania Institute for Service Learning
Points of Light Foundation
Project Service Leadership
Rhode Island Commission on National and Community Service
Summerbridge National
Teach for America
United Cerebral Palsy Associations
University of Pittsburgh—MARS Program
Utah Commission on Volunteers
West Virginia Commission for National and Community Service
YMCA of the USA
Youth Volunteer Corps of America
YouthBuild USA
Youth Service America
Youth Service Coalition

STATEMENT OF TOM JONES, DIRECTOR, WASHINGTON OFFICE, HABITAT FOR HUMANITY

Thank you members, colleagues, and friends. It really is a privilege and joy to be here to officially express the appreciation of Habitat for Humanity International for all of the programs of the Corporation for National Service, and for all that has gone before and for the huge expectations of what has yet to be as the result of this reauthorization.

As Congressman Shays just said, all of our leaders at Habitat have not always been for AmeriCorps and the Corporation. But Millard Fuller, to his credit, has had a complete 180 degree turn, and he has said that publicly and literally today there is no one in this country that's more committed—not even Harris Wofford—to the Corporation for National Service.

The frustration of this moment is there aren't enough minutes to tell all the facts about the difference the programs of the Corporation for National Service are making in the mission of Habitat for Humanity across this whole country. Just in terms of AmeriCorps National program, we now, I think, have about 775 service corps members involved. We are now heading towards 2 million service hours. We can now count 1,372 Habitat houses that have been built as the direct result just of national AmeriCorps. We know and can count over 177,000 Habitat volunteers who have been supervised by AmeriCorps volunteers—the skills that are learned and all that is taught. And this doesn't begin to say all that has been involved with. Habitat is involved with VISTA and with state AmeriCorps and with NCCC. And now, as was indicated, Senior Corps, we have a wonderful model being developed in the Midwest of Senior Corps and Habitat for Humanity. And on and on it goes.

The only criticism that we in Habitat, if you want to call it that, hear about AmeriCorps, about the other programs of the Corporation for National Service is, we need more. The problem it has created for us is we have 1530 affiliates across the United States each with its own local board, and each one of these is now clam-

oring, how can we get involved, how can we have AmeriCorps, and Senior Corps and VISTA workers doing it with us. The potential is unlimited.

You know, even as we sit here right now, there are boys and girls and young people coming home from school, entering their own home that their families own—proud of this—to go to their own kitchens and have their after-school snacks, to head to their own bedrooms to do their homework, to sleep tonight in a decent home and to get up tomorrow refreshed and to head to school again. This and so much more of that is happening because of what all of us together in this great program called the Corporation for National Service are doing together.

We are here to say thank you, we are here to say, let's take our hats off to the past, let's now take our coats off to the future together to make it even more and more significant in these years ahead. Thank you.

BUILDING SKILLS AND COMMUNITIES: KEY FINDINGS ON THE IMPACT OF AMERICORPS

An independent study performed by Aguirre International shows that AmeriCorps members are significantly improving communities in a cost-effective way. The main findings of the evaluation include the following:

AmeriCorps Effectively Prepares Americans for the Future

—AmeriCorps improves participants' job readiness skills in communications, interpersonal relations, analytic problem solving, understanding of organizational systems, and technology.

—Members with low skills and little employment experience developed new skills and enhanced existing skills.

—Members indicated that AmeriCorps had instilled in them a commitment to the ethic of service—99 per cent of members reported plans to continue some form of community service in the future, including careers in public service and community-oriented work.

AmeriCorps Strengthens Communities

—Regardless of specific assignment-tutoring children, running after-school programs, helping communities recover after natural disasters, improving health care services, or making neighborhoods safer-AmeriCorps members help bring communities together by providing needed services, strengthening nonprofit organizations, and getting children, families, and others more involved in solving local problems.

The Benefits of AmeriCorps Outweigh the Costs

—Direct benefits to communities and AmeriCorps members are at least $1.66 per dollar spent, showing that the program was "a successful investment of federal and community funds."

The study by Aguirre International, Making a Difference: Impact of AmeriCorps*State/National Direct on Members and Communities 1994–95 and 1995–96, was compiled from information from a survey of program accomplishments, interviews at 60 randomly selected programs, and case studies of eight sites. The report is available from the Corporation for National Service at (202) 606–5000 ext. 437.

[From the Albany Herald Opinion, Mar. 8, 1999]

HABITAT, AMERICORPS GOOD PARTNERS

(By Millard Fuller)

I admit I was skeptical a few years back when a partnership between Habitat for Humanity and AmeriCorps was proposed. How could a nonprofit, nonpartisan organization such as ours, with faith in God at our core, work in tandem with a federally sponsored bureaucratic program?

The whole notion struck me as a sure-fire recipe for inaction and red tape. Now, four years later, my concerns have vanished, replaced by the reality of a successful partnership between AmeriCorps and Habitat for Humanity affiliates across out nation.

Since 1994, more than 50 Habitat affiliates have worked with more than 2,000 AmeriCorps members and participants in other national service programs sponsored by AmeriCorps' parent, the Corporation for National Service. This year, more than 500 AmeriCorps members are wielding hammers and recruiting more volunteers for Habitat for Humanity.

This spring, AmeriCorps members are playing an exciting role in Habitat's Collegiate Challenge: Spring Break 1999. During Collegiate Challenge, more than 7,500 college students are dedicating their vacation time to building houses in partnership with God's people in need.

Hundreds of college students are expected to arrive in Albany ready to put their muscle behind the efforts to house people in need. Projects are urban, as in Miami, and rural, as in Belen, N.M. At sites like these, AmeriCorps members provide helping hands and supervisory skills needed to get the job done.

Helping people is what Habitat for Humanity is all about. Since 1976, Habitat—now at work in 61 countries—has been helping people in need of shelter build or renovate simple, decent, affordable houses.

Investing their "sweat equity" in the building process, then buying the houses through zero-interest loans, Habitat homeowners build not only homes, but also new lives for themselves and new hope for their communities.

To date, more than 350,000 people are living in Habitat houses. But this is just a start. Habitat for Humanity, by working in partnership with future homeowner families and with other organizations that share our vision, is working toward a world free of poverty housing and homelessness.

AmeriCorps has proven to be a good, reliable partner in many areas of the United States.

By offering local nonprofit groups a network of full-time trained people available for one-or-two-year stint, AmeriCorps helps maximize local resources. That's important to volunteer organizations like Habitat for Humanity. Our affiliates find hundreds of good people who want to help build houses in their off-hours, but few know much about construction.

That's where AmeriCorps has played such a vital role, AmeriCorps members help train local people in basic construction skills. They are there day in and day out, supervising and directing the part-time efforts of others.

The continuity, leadership and knowledge that AmeriCorps members provide allow us to increase both the number of volunteers we are able to mobilize effectively and the overall productivity of our efforts.

Habitat for Humanity and AmeriCorps have much in common. We share a goal of community-building. We share a belief in self-help and service, I no longer think of AmeriCorps as a bureaucratic program. AmeriCorps is a partner in the movement to eliminate poverty housing.

Millard Fuller of Americus is founder and president of Habitat for Humanity International.

THE IMPACT OF SERVICE-LEARNING ON STUDENTS AND COMMUNITIES

A number of studies have examined the impact of service-learning programs across all levels of education, and Learn and Serve America programs in particular. The findings of these studies are positive and outcomes are quite consistent.

Studies show that service-learning activities that are well-designed, linked to intentional learning outcomes, and engage students in significant amounts of service have strong benefits to student participants and to the communities they serve. The information provided below highlights only a few of the many positive outcomes of service-learning.

In addition to having positive outcomes for students and communities, Lear and Serve America programs have been shown to be a good investment. For every federal dollar spent, $5.60 worth of services were provided to the community (Melchior, 1999).

Service-Learning has a positive effect on students' engagement in school

Students engaged in service-learning have higher attendance rates than their peers who are not (Shaffer 1993; Supik 1996; Shumer 1994).

Students at all levels feel they learn more in service-learning classes than other classes (Weiler, LaGoy, Crane, and Rovner 1998; Berkas 1997)

Students engaged in service-learning are more likely to graduate (Astin and Sax 1998; Roose, Daphne, Miller, Norris, Peacock, White and White 1997).

Educators and students in schools with strong service-learning programs report a more positive school climate through a greater feeling of connectedness to the school (Billig and Conrad 1997; Wieler, et al 1999) and through decreased teacher turnover and increased teacher collegiality (Weiler, et al 1999)

Service-Learning helps students acquire academic skills and knowledge

Service-learning participation is associated with higher scores on the state test of basic skills (Anderson, Kinsley, Negroni, and Price 1991) and higher grades (Shumer 1994; Shaffer 1993; Dean and Murdock 1992; O'Bannon 1999).

Students who participate in high quality service-learning programs show greater school engagement and achievement in mathematics than control groups (Melchior 1999).

Middle and high school students who participate in service-learning tutoring programs increase their grade point averages and test scores in reading/language arts and math, and are less likely to drop out of school (Supik 1996; Rolzinski 1990)

Students or faculty report that service-learning improves students' ability to apply what they have learned in the real world (Eyler and Giles 1999; Gray, Ondaatje, Zakaras 1998; Oliver 1997; Nigro and Wortham 1998).

Students who participate in service-learning are less likely to engage in risk behaviors

High school and middle school students engaged in service-learning are less likely to engage in behaviors that lead to pregnancy or arrest (Melchior 1999; Allen, Kuperminc, Philliber, and Herre 1994; Shaffer 1993).

Students who engage in service-learning are less likely to be referred to the office for disciplinary measures (Follman 1997; 1998).

Service-learning has a positive impact on students' social and civic development

Students who engage in service-learning programs report a greater acceptance of cultural diversity (Melchior 1999; Berkas 1997).

High school students who participate in service-learning programs are more likely to develop bonds with more adults and agree that they could learn from and work with the elderly and disabled (Morgan and Streb 1999).

Students who engage in service-learning increase their understanding of how government works (Berkas 1997).

High school students who participate in service-learning are more likely to be engaged in a community organization and are more likely to vote fifteen years after their participation in a program than those who did not participate (Youniss, McClellan, and Yates 1997; Yates and Youniss 1998).

Service-Learning benefits communities

Community members who participate in service-learning as partners with the school see youth as valued resources and positive contributors to community (Billig and Conrad 1997; 1999; Weiler, et al 1999; Melchior 1999; Kinsley 1997).

90 percent of agencies indicated that Learn and Serve America participants helped the agency improve their services to clients and the community (Melchior 1999).

SUMMIT DECLARATION

Two centuries ago, America was founded on the proposition that just as all people are endowed by their Creator with inalienable rights, citizenship entails undeniable responsibilities. As each of us has the right to Life, Liberty, and the Pursuit of Happiness, each of us has an obligation to give something back to country and community a duty to take responsibility not just for ourselves and our families, but for one another. We owe a debt of service to fulfill the God-given promise of America, and our children.

In this time of opportunity at the dawn of a new century and a new millennium the need for shared responsibility is self-evident.

The challenges of today, especially those that confront our children, require a special commitment of us all. People of all ages and from all walks of life must claim society's problems as their own, pulling together, leading by example, and lifting American lives.

Our obligation, distinct and unmistakable, is to assure that all young Americans have

—Caring adults in their lives, as parents, mentors, tutors, coaches

—Safe places with structured activities in which to learn and grow

—A healthy start and healthy future

—An effective education that equips them with marketable skills

An opportunity to give back to their communities through their own service

As Americans and Presidents, we ask every caring citizen to pledge individual commitments of citizen service, voluntary action, the efforts of their organizations,

or commitments to individual children in need. By doing so, this nation pledges the fulfillment of America's promise for every American child.

GERALD R. FORD,
JAMES EARL CARTER,
RONALD W. REAGAN/BY MRS. NANCY REAGAN,
GEORGE H.W. BUSH,
WILLIAM JEFFERSON CLINTON,
The Presidents of the United States.

Senator BOND. Thank you very much, Senator Wofford. And I would be remiss if I did not say that it has been a real pleasure to work with you during the period that you have served as head of the Corporation, and I certainly commend you. No one could have provided greater spirit, enthusiasm and commitment to the program than you have. And it has been a pleasure to work with you.

Now, having said that, I move on to the questions.

FINANCIAL MANAGEMENT

In your 21 pages of testimony and 9 pages of statements of support, you outline on the basis of the work of the Corporation, and the work of the participants, that the Corporation is able definitively to say that it has been able to achieve all of the goals of its programs.

The testimony provides statistics on a number of State and national direct programs, and you cite articles from Habitat for Humanity in support of the Corps. For all of these reasons, the Corporation believes that its appropriated funds are being well spent and justifies a significant increase.

While I appreciate the letters of support and the news articles, I am curious to know how the Corporation can definitively know how its programs are working when, one, the Corporation does not have a reliable cost accounting system in place, and your financial systems cannot effectively and efficiently provide reliable and timely information; two, your performance report seems to emphasize outputs rather than real outcomes; and, three, the OIG continues to identify a number of problems with your grantees.

Senator WOFFORD. The grantees that you were referring to earlier, Mr. Chairman, are the governor-appointed State commissions, which is the essential structure that Congress set up. So each of those State commissions is the first body that makes the decisions, appraises, monitors and—it is not that they are troubled, but that they have major responsibilities under this structure that Congress set up.

They are increasingly producing the evaluations themselves. Second, the devolution in the Corporation is to the non-profit sector; so the organizations that, in fact, select the AmeriCorps members, run the programs, themselves are developing an increasing record of evaluations on outcomes, not just input.

We want to summarize for you and make sure that you have looked at the number of evaluations that are focused on outcomes such as the evaluation that was given on the District of Columbia literacy efforts, which is focused on outcomes. I think if we can put together the record of those evaluations this year, they will in

many ways answer the question of the achievements of the AmeriCorps members and the other parts of National Service.

We have, with the help of the State commissions, operated a program that has made the decisions on grants that have been made successfully in these last years. The outcome record is being developed, and I think we have to solve our management problems here. And we are on the road to doing so.

But the programs themselves are extraordinarily successful, as recognized by the tremendous demand from the non-profit sector and from the governors of this State—of this country for more AmeriCorps members.

[CLERK'S NOTE.—The program evaluations submitted by the Corporation can be found in the Subcommittee files.]

COST ACCOUNTING

Senator BOND. OIG and KPMG auditors have recommended the Corporation install a cost accounting system. Would you agree with that recommendation?

Senator WOFFORD. Well, I would like Tony Musick to speak to that. We are moving in that direction, but it has questions about it.

Mr. MUSICK. Right. We would have no disagreement about installing a cost accounting system. Our issue has always been as to the timing. This past year, we just implemented a new finance system. We needed to get the core system in place.

We are already in a position where there is new releases of this package by the—the vendor, because it is an off-the-shelf package. So we have to implement that. And then the other higher priority seemed to be a grant system.

Cost accounting, it has been on our plate but, again, there is only so much that we can get done with the resources and the people. And we have tried to focus on what we think are the higher priority issues. But cost accounting would be on the list, but just at a later date.

PROGRAM ADMINISTRATION

Senator BOND. For the past 2 years, the administration has requested additional administrative funds to address urgent program administration needs. And we have provided $3 million in fiscal year 1999 and $1.5 million last year. And the Corporation is still requesting another budget increase. I am concerned about how the Corporation can account for these funds in the absence of a cost accounting system.

And second, in terms of the almost $8 million requested in additional funds for program administration, what workload analysis is this based on? In other words, does this amount take into account the administration's plan to increase the AmeriCorps membership by 12,000 in fiscal year 2001 and initiating new proposed programs?

And I also would like you to address in terms of the budget submission, why 52 staff members in public liaison recruit and other programs? That is about 15 percent of the workforce, and I would like to know what the responsibilities of these staff members would

be, and how much the positions pay. And is this a wise allocation when you still have management problems in the program?

Senator WOFFORD. I would like Wendy Zenker to comment on that. But I will just make the point that much of the staff you are just pointing to is focused on developing the private sector partnerships and support from the private sector which has been so important to this success of ours.

Ms. ZENKER. There were several points that you made. I think some we can answer right now. Others, we might like to get back to you for the record.

Senator BOND. Please, if you would.

Ms. ZENKER. With respect to the $3 million extra money that you gave us in 1999, we have been able to give expenditures reports to the Congress that have also been looked at by the Inspector General through an audit that KPMG did of the action plan, so that we generally think we have given you good information on how we spent that $3 million.

When you look at our 2001 request, we are asking for more money for program administration. We have needs for both new systems to bring on line to continue the improvements that you have seen in 1999 and that we are working on now in 2000, as well as additional people.

We are seeing the money you gave us in 1999 helped us to hire the people that made a difference in terms of reducing the material weaknesses and bringing new systems up. We would like to continue those improvements. We are doing it this year. We would like to continue it in 2001. But we can provide additional information for you.

[The information follows:]

The Corporation is requesting an additional $7.7 million for program administration in fiscal year 2001. This request is based on our analysis of current needs irrespective of any increase in AmeriCorps membership or new program initiatives. Of this, $4.1 million is requested to support additional management systems improvements and additional staff resources for the Corporation; and $3.6 million is for State Commissions.

Corporation Program Administration Requirements.—The management system improvements that the Corporation is planning for 2001 include the implementation of additional modules to the financial management system. These include an accounts receivable subsystem, a travel management system, and an inter-agency electronic transfer interface.

Our most important system initiative for 2000–2002 will be the design and implementation of an integrated grants management system. We have started work on a new grants management system. We are conducting the requirements analysis for the new system with funds made available in fiscal year 1999 and plan to contract for system design work in fiscal year 2000. Our plan is to build the system following a modular approach, designing and implementing the core modules first. Additional modules will be built with funds requested in the 2001 budget. In the fiscal year 1999 financial statement audit, the Inspector General noted the critical need for the Corporation to build the grants system.

The Corporation also needs to meet the increased demand for information on our programs and service opportunities through the web. We are starting work on a web-based recruitment system that will allow individuals to express their interest in serving and be matched with service opportunities in all of AmeriCorps, including AmeriCorps*VISTA and AmeriCorps*NCCC. Corporation application forms and other documents will be available to grantees and the public through the web. We will also provide a repository of Corporation policies and procedures on the web for Corporation grantees. Funds requested in fiscal year 2001 will support these activities.

Finally, of the funds requested for the Corporation, some additional resources will be directed towards hiring staff. The areas for increased attention include

AmeriCorps program officers to support their efforts to better manage and monitor grantees; additional staff in the National Service Trust for customer service, data quality and payment processing; staff for the Grants Office, especially to work on grants closeout; and staff to support increased technology initiatives.

State Commissions.—The remainder of the program administration increase ($3.6 million) is requested for grants to State Commissions for administration. The budget request states that these increased monies would not be subject to a match by State Commissions. (The fiscal year 2000 baseline of State Commission administrative funds will continue to be matched at 50 percent.) The Corporation believes that there have been increased responsibilities placed on State Commissions over the past several years. More authority has devolved to State Commissions including an education award-only portfolio; more inclusion of people with disabilities; more responsibility for member training; and more responsibility to act as the main state organizer/catalyst for volunteer activities, including the statewide America's Promise work. Starting this year, we are also requiring that States participate in the Administrative Standards review assessment, and they are responding to the pre-audit surveys and subsequent audits that will be performed by the Inspector General in the coming years. The State Commissions have been required to match their administrative grant at an increasing level—initially the match was 15 percent and has grown to the current 50 percent match.

For these reasons, we believe that increased program administration funds should be made available to State Commissions in fiscal year 2001.

OIG CLARIFICATION

OIG and KPMG did not audit the Action Plan. Instead we reviewed the plan and issued OIG report 00–13 on December 1, 1999. In that report, we clearly stated that the Corporation's reported expenditures were budget estimates and that the Corporation lacks a cost accounting system to track actual expenditures against the funds allocated to Action Plan activities in accordance with the Corporation's fiscal year 1999 appropriation requirements.

Senator BOND. Thank you, the 52 staff and public liaison?

Ms. ZENKER. The 52 staff and public liaison, if I can talk about the two functions that they perform: One, we have our recruitment function as part of that 52. And between the NCSA program and the DVSA recruitment actions, people work to find both VISTA members as well as to advertise AmeriCorps and try to bring in more AmeriCorps members.

The public liaison function actually does good work for us in forming partnerships with private sector corporations. We are pleased to report, for example, that Best Buy contributed $100,000 this past year to the Martin Luther King grant program. So we were able to make more grants to local communities because we reached out to Best Buy and they wanted to partner with us.

Likewise, we are building partnerships in the digital area with Yahoo, AOL, Microsoft, IBM. Our public liaison group reaches out to the private sector to form those partnerships.

Senator WOFFORD. There are only six actually in what we call public liaison. There is the press information office, and then there is recruitment, and others that must be in that number that you gave, which we will look at it and we will respond on it.

Senator BOND. Thank you very much.

[The information follows:]

Attached is a list of the 52 positions, including the office, position title and salary for each FTE. The staff are located in the Offices of Public Liaison; Leadership Development and Training; Recruitment; and AmeriCorps Leaders. Briefly, these offices are involved in the following activities:

—The AmeriCorps Leaders program enables talented alumnae of AmeriCorps to serve as front-line leaders in programs enrolling AmeriCorps members.

—The Leadership Development and Training office provides training and technical assistance for Corporation-funded programs and works with state and re-

gional program staff to incorporate specific nationally developed curricula into locally sponsored training events.

—The Recruitment Office of AmeriCorps attains a sufficient pool of applicants for the targeted number of members requested by AmeriCorps grantees, and processes and places national applicants for AmeriCorps*VISTA and AmeriCorps*National Civilian Community Corps.

—The Office of Public Liaison does outreach to key partners in the private and non-profit sectors.

These offices are integral to the entire operations of the Corporation. They represent about eight percent of our total staff complement.

The following list provides the title and salary for each position within these offices:

Office of Public Liaison:	
Director	100,000
Associate Director	79,721
Associate Director	63,188
Associate Director	63,188
Special Assistant	36,640
Public Liaison Associate	32,614
National Service Development Officer vacant	(1)
Assistant Director	(1)
Office of Leadership, Development and Training:	
Director of Training and Technical Assistance	110,026
Director, Leadership and Training	96,186
Assistant to the Director	92,809
Training Administrator	89,948
Program Officer	88,180
Program Officer	85,624
Director, National Service Leadership Institute	82,588
Program Officer	80,011
Training and Technical Assistance Specialist	75,794
Senior Training Specialist	68,000
Senior Training Specialist	67,879
Training and Technical Assistance Specialist	63,535
Training and Technical Assistance Specialist	63,381
Senior Training Specialist	65,000
Logistics Manager	50,905
Administrative Officer	47,515
Training Logistics Assistant	39,913
Training Administrative Specialist	30,621
Administrative Assistant	28,298
Program Officer	(1)
Office of AmeriCorps Leaders:	
Director	76,211
Deputy Director	61,425
Associate Program Officer	40,530
Office of Recruitment:	
Director	95,587
Senior Marketing Specialist	80,736
Recruitment and Placement Manager	76,809
Recruitment Coordinator	48,505
Recruitment Coordinator	45,257
Recruitment Coordinator	43,864
Outreach Coordinator	40,304
Recruitment Coordinator	38,978
Marketing Specialist	35,678
Marketing Specialist	34,349
Recruitment Coordinator	33,330
Recruitment Coordinator	34,569
Recruitment Coordinator	32,856
Recruitment Coordinator	32,856
Recruitment Coordinator	31,561
Recruitment Coordinator	32,180
Recruitment Coordinator	31,290
Marketing Assistant	22,639
Recruitment Coordinator	(1)
Diversity Recruitment Specialist	(1)

Administrative Assistant ..... ([1])

[1] Vacant.

NATIONAL SERVICE DEMOGRAPHICS

Senator BOND. Senator Mikulski.

Senator MIKULSKI. Thank you, Chairman Bond.

And, of course, Senator Wofford, we also want to offer our very sincere congratulations for your service. We know that throughout your entire life, you have been devoted to community service, whether it was your work in the Peace Corps, and the leadership that you brought to the Corporation for National Service. So we really want to thank you for all that you have done.

And I would like to actually go over some of the questions about what we have done and then talk about digital. But there were two goals when we established National Service. And one was to really re-instill the habits of the heart in young people.

There was an erosion of the ethic around really the volunteering in one's community. And in many instances, there were very serious shortfalls in the volunteer community. And then the other was the skyrocketing student debt that so many children—young people had. So it was how to bring those two—to instill an ethic of habits of the heart, and yet these tools.

That is—you talked about some of the results, but let us go to the students themselves. Could you tell me how many students have actually utilized the paydown on their student debt and what that meant? And if you cannot answer it, anyone on your team, and any observations the IG might have.

Senator WOFFORD. About 105,000 awards of the education trust have been made, have been earned by the AmeriCorps members in these last 5 years. So far, 61,000 have been drawn down in whole or in part. And the—it appears that since the people have 7 years to use their vouchers——

Senator MIKULSKI. There is—there are two things: One, the drawing down of the student debt; and then the other is the voucher for many who will be, like, out of the Conservation Corps and so on, that—the ability to go on to school which they would have never had. So they learn skills. They learned a work ethic, as well as a volunteer ethic.

Senator WOFFORD. Of the 78 percent who are using their education awards in the—so far, in the estimate we have, 56 percent use their awards to go to school.

Senator MIKULSKI. 56 percent to go.

Senator WOFFORD. 56 percent use the awards to pay college costs. 33 percent are using their awards to pay student loans. And 9 percent use their awards both to pay student loans off and to pay for more education.

Senator MIKULSKI. Well, that is totally different than what we thought originally would happen.

Senator WOFFORD. In what way, Senator?

Senator MIKULSKI. Oh, no, that is not a criticism. I mean, this is why the observation is so important, that really the recruitment would be from college graduates who would then give the two years in their community, somewhat along the Peace Corps model, or

that part-time model for those who could not go away, but that it would be college graduates to reduce student debt.

Now, what you are saying though is the people who are volunteering have not finished college, or may have—maybe have not started college.

AMERICORPS EDUCATION AWARD

Senator WOFFORD. We have the figures here. Approximately a third have already earned college degrees and have loans. About a third—or if you get the actual figures, it is in three parts—have had some college, and take a year in AmeriCorps or part-time AmeriCorps during their college years. And about a third have not yet gone to college.

Senator MIKULSKI. Well, I see that my time is up. But from the perspective of—do you think that without the—without either the student reduction, the loan reduction, or the voucher to be able to pursue higher ed, do you think you could recruit people to AmeriCorps?

Senator WOFFORD. Could we recruit people for AmeriCorps?

Senator MIKULSKI. Yes.

Senator WOFFORD. It has a tremendous value in recruiting.

Senator MIKULSKI. I am not for eliminating that.

Please do not misunderstand me.

Senator WOFFORD. Could we—could we recruit people? People are responding to AmeriCorps as patriots. And I think that the answer is: You could recruit without the education award.

The education award is tremendously important to them, however, and makes the recruiting much easier and, secondly, is of tremendous benefit to those who have given service to get that kind of investment in their education.

AMERICORPS DEMOGRAPHICS

Senator MIKULSKI. Well, I think what would be useful for me to see and for the record to show, who comes to AmeriCorps. And I know you have several different programs, like, essentially the Civilian Conservation Corps, AmeriCorps. But really a breakdown on gender, income, education, so that we get a profile of who comes, knowing that there is no typical volunteer.

But it sounds like that there are about three to five different profiles of who volunteers. And then therefore, based on that, what were the elements of the program that attracted them, but then what are the tools?

So if we are essentially attracting somebody who finished a community college as the first in their family ever to have gone, but they do not have the bucks to go on and would like to also do something with their life, come to AmeriCorps and then they get the voucher, then to go on to the University of Maryland, or other schools and so on.

So am I on the right track here or——

Senator WOFFORD. Yes, you are. And we will send you the—we will get to you the breakdown, remembering that the 900 AmeriCorps programs using AmeriCorps members range from University of Notre Dame or Teach for America, where they get outstanding college graduates to teach for a year or two in hard-

pressed school, to Youth Build which is designed for high school dropouts to both learn a skill and, in many cases, to go on to community college or to college. And in between are the bulk of the programs.

So we will try to show you the different profiles that are—that when you look at the 900 programs using the 40,000—

[The information follows:]

AMERICORPS OVERALL DEMOGRAPHICS
1998-1999

Race/Ethnicity

	State/National	NCCC
African-American	27%	6%
American Indian	4%	<1%
Asian	3%	4%
Native Hawaiian or other Pacific Islander	1%	-
White	49%	73%
Other	2%	6%
Refused, Don't Know	12%	9%

Spanish or Hispanic Descent

	State/National	NCCC
Hispanic	16%	7%
Non-Hispanic	84%	80%
Not ascertained		12%

GENDER

	State/National	NCCC
Female	71%	63%
Male	29%	35%

Age

	State/National	NCCC
Under 18	2%	-
18-21	32%	37%
22-25	29%	51%
26-29	11%	1%
30-33	7%	-
34-37	5%	-
38-41	4%	-
42-45	4%	-
Over 45	7%	-
Not ascertained		11%

Education Completed

	State/National	NCCC
Less than H.S. completed	9%	<1%
High School	21%	27%
Some College	36%	26%
Associate Degree	7%	4%
College Grad.	22%	43%
Graduate Study	2%	<1%
Grad. Degree	4%	<1%

AMERICORPS OVERALL DEMOGRAPHICS 1998-1999 (cont.)

Income Status (Family)

	State/National
$10,000 or less	10%
$10,001 to $25,000	17%
$25,001 to $50,000	34%
$50,001 to $75,000	20%
$75,001 to $100,000	10%
over $100,000	9%

Income Status (Family)

	NCCC
$5,000 or less	2%
$5,001 to $10,000	2%
$10,001 to $20,000	7%
$20,001 to $40,000	20%
$40,001 to $70,000	32%
over $70,000	21%
Not ascertained	17%

Members' Household Employment Status

	State/National	NCCC
Unskilled Laborer	16%	-
Semi-Skilled Laborer	20%	-
Skilled Laborer	15%	-
Clerical/Sales	29%	-
Professional/Managerial/Technical	20%	-

Marital Status

	State/National	NCCC
Single, never married	72%	98%
Married, living with spouse	19%	<1%
Married, not living with spouse	2%	-
Widowed	1%	-
Divorced	6%	-

Children

	State/National	NCCC
Yes	34%	-
No	66%	-

Senator MIKULSKI. But I do not need to have all 900 programs. What I am really looking at is: Of the 61,000 people who—first of all, 100,000 people have earned a voucher.

Senator WOFFORD. We——

Senator MIKULSKI. You have had 100,000 people——

Senator WOFFORD. Yes.

Senator MIKULSKI. 78,000 have already utilized——

Senator WOFFORD. Not already, but that is what we estimate it will be. 60,000-some have already drawn down the voucher or paid off their college loan. But it looks like it will be 78 percent by the end of 7 years. We have not had the full 7 years yet to know whether in the last year or two of—of the first AmeriCorps members, the numbers will go up. But it looks like it will be 78 percent, yes.

Senator MIKULSKI. Okay.

Thank you.

Senator BOND. Do you have further questions, Senator Mikulski?

Senator MIKULSKI. Yes, I do, if I could.

Senator BOND. Go ahead.

Senator MIKULSKI. Okay. Oh, okay.

DIGITAL DIVIDE

Then let me move quickly to the digital divide issues. And to be clear, when we hear about the 52 people in public affairs, not all are writing press releases. Some are doing recruitment, and then some, six, are actually liaisoning with the private sector.

And that could be everything from the traditional United Way private sector agencies to the new high-tech crowd.

Senator WOFFORD. Yes.

Senator MIKULSKI. This then takes me to the digital issues. Could you just quickly list what liaisons AmeriCorps is already doing with the digital community, with the high-tech community? And what does that actually mean to the empowerment of children or adults?

Senator WOFFORD. Yes. I think the first partnership was with IBM on the tech team. They have now renewed with the second major successful project in the digital and high-tech field.

We then in the last year have developed with General Powell and America's Promise, partnerships with YMCA and the Boys and Girls Clubs, backed by AOL, Microsoft, Sun Systems. Just now Yahoo has——

Senator MIKULSKI. Now, is that PowerUp?

Senator WOFFORD. That is PowerUp, that particular program. We have—in our written testimony there that you have, we have on page 16, a listing of a number of the original projects that we have had, including STAR in Maryland in the field of digital divide. And we are ready, we are positioned, and we have had experience to move into the—in the directions we hope you will help shape for the E-Corps.

Senator MIKULSKI. Now, are you finding requests from local school systems and non-profits like Boys and Girls Clubs, which I think all of us are just devoted to, that there is a real request for AmeriCorps volunteers with digital skills to come to communities?

Senator WOFFORD. Yes. There is——

Senator MIKULSKI. Is this——

Senator WOFFORD [continuing]. A very large demand from both school systems and the—the two biggest organizations on the digital divide front are Boys and Girls Clubs and the YMCAs. And both of them already have some AmeriCorps members in their programs for computer teaching and computer access for those that do not have them for after school and on weekends and evenings. And the demand is tremendous to us. Hundreds and hundreds have been asked for.

Senator MIKULSKI. Well, as you know, my idea for E-Corps is not to work directly with the children. It is to work side by side, but to train the people who will work with the children, teachers, teachers' assistants, many of whom cannot even afford to buy computers themselves.

And often, though they take teacher training, it is kind of that one-shot deal like what you were talking about. You know, they can set us down, but unless it is repetition, repetition, repetition, we do not learn it. And so I am thinking about the 40-year-old elementary school teacher who really might take the course and be eager, but needs help.

Is—this is the way I envision it. So it is that when the volunteers leave, there is not a gap in who is going to teach the kids technology. We have then done the training even in often the volunteer communities.

Senator WOFFORD. That makes a lot of sense, Senator. We want your help in shaping this. Some of the programs are doing something very close to that. The other thing that they are doing is not directly working with the students, but organizing the centers, the YMCAs and the Boys and Girls Clubs. We can show the local sites where that is——

Senator MIKULSKI. Well, I do not——

Senator WOFFORD [continuing]. Going on right now.

Senator MIKULSKI [continuing]. Want to create something that duplicates what is already in existence.

Senator WOFFORD. This is——

Senator MIKULSKI. And I certainly do not want to duplicate what the private sector has shown a willingness to do, like the PowerUps and the IBMs and the Steve Cases and the AOLs.

So we really do need advice about whether—I happen to think it is a good idea. You are not going to tell me it is a bad idea.

Senator WOFFORD. It is a very good idea. You know I think it is a very good idea.

Senator BOND. You came from the Senate, not from the turnip truck.

Senator WOFFORD. Right.

Senator MIKULSKI. So—but really, with all—I do—if we—I really do have a passion about helping cross this digital divide, but really in teaching the teachers. Do you——

Senator WOFFORD. Yes.

Senator MIKULSKI [continuing]. Think we are duplicating, or do you—please, I invite you to be candid.

Senator WOFFORD. Yes. No, I just was trying to say that there are two fronts, one in the schools and in the school systems and,

two, in the great community centers and community organizations like Boys and Girls Clubs and YMCAs.

And in both cases, they need the E-Corps that you are talking about to help them get it started, to help train the people that will do it.

Senator MIKULSKI. Thank you. I think that covers it.

Thank you.

Senator BOND. Thank you very much, Senator Mikulski.

And we do appreciate your testimony and answers, Senator Wofford. And we look forward to continuing dialogue with your staff in addressing both this exciting new idea and the management issues.

OFFICE OF INSPECTOR GENERAL

Now that we have heard from the Corporation on the issues and their efforts to correct management deficiencies, I now invite Ms. Luise Jordan, and Ms. Karyn Molnar to present their views in response to the testimony.

Before I begin, I would recognize you, Ms. Jordan and Ms. Molnar, for the very hard work and time and effort that you have dedicated to overseeing the Corporation. Your independent and objective views are critically important to this subcommittee, and I trust also to the Corporation.

Ms. Jordan, I understand that you have written testimony which will be made a part of the record, without objection. And we would like to invite you and then Ms. Molnar to use 5 minutes each to summarize any oral remarks you wish to make.

Ms. Jordan.

STATEMENT OF LUISE S. JORDAN

Ms. JORDAN. Mr. Chairman, Senator Mikulski, I appreciate the opportunity to testify again on the results of the audit of the Corporation's financial statements and other financial management issues.

CORPORATION AUDIT

As you have heard, the opinion on the financial statements is similar to last year's, although improvements in management controls and the Corporation's new accounting system indicate progress.

The Corporation is somewhat unhappy that it did not receive a clean opinion. Although a clean opinion is an important goal, it is only one of several goals that need to be achieved. Modern systems and good management controls are essential to reach the end goal of reliable, useful, timely financial information and to support ongoing management and accountability.

Although—excuse me. Although implementation of its new accounting system indicates progress, the new system is a general ledger system, not a fully integrated management system.

As you have heard, the Corporation's present systems cannot effectively and efficiently provide reliable and timely information to manage day-to-day operations.

The Corporation lacks both a cost accounting system and an effective integrated grants management system. The Corporation still needs to correct problems in areas that are critical to a well-managed organization.

The five areas cited as material weaknesses in 1999 were first reported as material weaknesses in 1996. The Corporation's guide for improvement is its Action Plan. Some of the plan's major tasks have been achieved. None of the goals have been attained.

We are not sure that the plan is an effective road map for proactive improvement or for the optimum use of the Corporation's resources. We have recommended that the Corporation establish objective standards and measures for its corrective actions and its financial improvements. We have also recommended that the Corporation establish a process to determine that the Action Plan and other corrective actions are working as intended, rather than waiting for an external event or the next audit report to advise them of their next problem.

If the Corporation wants assurance that it is going to work its way out of the maze of issues that confront it and effectively carry out its programs, it is time that management views this maze from the top down, rather than feeling their way through it and reacting to problems.

Let me conclude by reiterating my statement that the Corporation has made progress. Now that the Corporation has its new accounting system and additional financial management staff, I want to also say that continued improvement is probable. It is OIG's hope that future audits will reveal the effectiveness of the new resources, the effectiveness of the corrective actions, as well as the Corporation's continued progress.

PREPARED STATEMENT

I have one statement, however, from a personal point of view. Senator Mikulski, as the first person in my family to go to college, after being a community volunteer and graduating from Anne Arundel Community College, I did not have an education benefit. I "clerked" my way through Dart Drug in Laurel. It would have been very nice to have had an education benefit.

Senator BOND. Thank you, Ms. Jordan.

[The statement follows:]

PREPARED STATEMENT OF LUISE S. JORDAN

Mr. Chairman and Members of the Subcommittee, I appreciate this opportunity to testify on the results of the audit of the Corporation for National and Community Service's fiscal year 1999 financial statements[1] and other financial management issues.

The Corporation for National and Community Service is required by the Government Corporation Control Act (31 U.S.C. 9101 et seq.) to produce annual financial statements. The Act requires that the Office of Inspector General audit, or engage the services of an independent auditing firm to audit, the statements. CNS OIG engaged KPMG LLP to audit the fiscal year 1999 financial statements. Ms. Karyn Molnar, the KPMG engagement partner for the audit is also here today to testify.

The audit was conducted in accordance with government auditing standards. Because of our knowledge of the Corporation and its operations, the audit included extensive audit procedures to overcome known material weaknesses and included tests

[1] OIG Audit Report 00–01: "Audit of the Corporation for National and Community Service's Fiscal Year 1999 Financial Statements.

of all three financial statements. As a result, KPMG was able to issue an unqualified opinion on the Corporation's Statement of Financial Position at September 30, 1999. However, KPMG was unable to render an opinion on the Statement of Operations and Changes in Net Position, and the Statement of Cash Flows for the fiscal year.

Although the opinion on the fiscal year 1999 statements is similar to that on the fiscal year 1998 statements, the Corporation has achieved improvements in the controls over its financial activities. As discussed in the Independent Auditors' Report and illustrated in Exhibit I, material weaknesses related to internal controls over financial reporting[2] have been reduced from eight in fiscal year 1998 to five; two of the eight are now classified as reportable conditions; and one has been corrected to the extent that we will provide recommendations for further improvement in our final report on this audit, the "management letter" (OIG Report 00–38[3]). These improvements, and the Corporation's new accounting system implemented in September 1999, indicate continued progress toward producing auditable financial reports.

However, the Corporation has yet to fully correct all of its financial management deficiencies. The five areas cited as material weaknesses in fiscal year 1999 were first reported as material weaknesses in 1996. They include: financial management and reporting, the Corporation's general control environment,[4] grants management, net position reporting, and fund balance with Treasury. The integrity of data in the National Service Trust and matters related to the Corporation's new accounting system's controls and reports are cited as reportable conditions.

The Report on Compliance with Laws and Regulations also repeats two areas of non-compliance with laws and regulations: the Corporation's substantial non-compliance with Federal financial systems requirements during the majority of fiscal year 1999, and the Corporation's practice to carry over grant funds when renewing grants that is not always in compliance with appropriation laws related to the use of National and Community Service Act funds.

As is our responsibility under the Government Corporation Control Act, CNS OIG participated in the planning of the auditors' work and evaluated the nature, timing and extent of the procedures performed, monitored progress throughout the audit, and reviewed the auditors' report and the work papers supporting its conclusions, with which we concur.

The Corporation is unhappy that it did not receive a "clean" opinion on its financial statements. However, the auditors' opinion is a matter of professional judgement and objectively considers all aspects of the work performed. The auditors test and consider the amounts and disclosures in the financial statements and the overall financial statement presentation. KPMG performed the audit, evaluated the results, and concluded that the conversion of data to a new accounting system and the lack of an audit trail to explain adjustments to certain accounting balances made it impossible to obtain satisfactory evidence to support $10.5 million reported as an increase in unexpended appropriations. KPMG concluded that they could not issue an opinion on the two financial statements that included this unexplained balance.[5] OIG concurs.

Both the Corporation and KPMG believe the unknown amount results from a bookkeeping error that involves data converted from the Corporation's old system to the new. The Corporation does not know what comprises the $10.5 million. While the audit resulted in numerous adjustments to correct the financial statements, neither the Corporation nor KPMG was able to resolve this difference. We do not know what accounts are impacted, and absent evidence or an audit trail, there is no way to adjust and correct for it.

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[2] The Corporation's procurement and contracting operations were found to be materially weak and vulnerable to fraud and abuse in OIG Audit Report 98–24: "Audit of the Corporation's Procurement and Contracting Processes and Procedures," August 1998 and in several audits of Corporation contracts issued during fiscal year 1999. OIG has begun a follow-up study to determine the extent of the Corporation's corrective actions in this area.

[3] OIG Audit Report 00–38: "Recommended Improvements to the Corporation's Internal Controls—Fiscal Year 1999 Financial Audit Management Letter" is currently being prepared by KPMG and is expected to be issued within the third quarter of fiscal year 2000.

[4] Control environment factors include commitment to competence, management philosophy and operating style, organizational structure, and assignment of authority and responsibility. The control environment sets the tone of an organization, influences the level of control consciousness, and provides the discipline and structure of an organization.

[5] The $10.5 million impacts both the Statement of Operations and Changes in Net Position and the Statement of Cash Flows. On the Statement of Operations and Changes in Net Position, it is included in the $81.7 million reported as "Increase in Unexpended Appropriations, Net." (Note 14 to the financial statements lists it as a $10.5 million "other adjustment"). It is part of the $9.7 million balance described as "Other Adjustments" on the Statement of Cash Flows.

A "clean" audit opinion is an important goal for the Corporation. However, it is only one of several goals that need to be achieved. As the Comptroller General recently testified, modern systems and good controls are essential to reach the end goal of reliable, useful, and timely financial information to support ongoing management and accountability.

Although implementation of its new accounting system indicates progress, the new system is a general ledger system—not a fully integrated financial management system. The Corporation needs modern integrated financial systems that support financial and programmatic operations. As the audit report indicates, the Corporation admits to problems in obtaining mandatory reports from the new system.

The Corporation still needs to acquire basic financial systems that are critical to its operations and accountability. The Corporation lacks a cost accounting system. In December 1999, OIG reported that the Corporation lacked a cost accounting system to account for the $3 million in administrative funding earmarked for financial improvements, project or program costs.[6] Even more fundamentally, the Corporation which relies on grants to carry out its major programs, lacks an effective, integrated grants management system.

Presently, the Corporation's financial systems cannot effectively and efficiently provide reliable and timely information to manage day to day operations. The current financial statements also need improvement if they are to provide meaningful information to Congress and other users. In the Independent Auditors' Report, KPMG states, "The Corporation's financial statements do not currently provide information related to its many service programs, the administrative costs of those programs, or the separate operations of the National Service Trust."[7]

The audit results also indicate that the Corporation's management controls require additional improvement. The Corporation has corrected three of the eight material weaknesses disclosed by the audit of the Corporation's fiscal year 1998 financial statements. However, those that remain uncorrected are controls that are critical to a well-managed organization.

The Corporation's primary guide for corrective action has been its Action Plan. Some major tasks under the plan have been achieved; for example, installation of the new accounting system, selection and hiring of a new CFO and new financial management staff, installation of the National Service Trust's imaging system, and the development of a management control plan. However, none of the Plan's goals has been attained.[8]

OIG is also not sure that the Corporation's Action Plan is an effective "road map" that will result in proactive improvements or the optimum use of the Corporation's resources. In our Action Plan reports, in the current financial statement audit report and in previous ones, as well as in discussions with management, we have recommended that the Corporation establish objective standards and measures for corrective actions and financial improvements. We have also recommended that the Corporation establish a process to determine that the Action Plan and other corrective actions are working as intended—rather than waiting for an external event or an audit report to advise them of their next problem. Such a process should also be designed to result in reliable evidence that measures and documents progress toward its goals and that management controls assessments have been appropriately carried out. It should establish clear accountability. Finally, the plan and the process should assess resources and resource allocation including staffing and related issues. If the Corporation wants assurance that it is going to work its way out of the maze of issues that confront it, and effectively carry out its programs, it is time that management views the maze from the top down rather than feeling their way through it and reacting to problems as they occur or are brought to management's attention.

For perspective, it is important to recall the extent of the problems that the Corporation has had to correct. Over the past several years, OIG's audit reports have classified numerous deficiencies into broad areas of material weaknesses that encompassed the most critical aspects of the Corporation's financial management. We also reported that the Corporation's legacy system could not produce reliable financial information. Given the pervasiveness of these deficiencies, it is not surprising that, although the Corporation has made progress, we are reporting that not all of the material weaknesses have been corrected.

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[6] In OIG Audit Report 00–13: "Review of the Corporation for National and Community Service Action Plan" we reported that the amounts reported by the Corporation were based on initial budget estimates.

[7] OIG Audit Report 00–01, page 5.

[8] Most recently, in its March 21, 2000 Action Plan report to Congress, the Corporation reported that none of the major financial management goals had been attained.

Let me conclude by reiterating my statement that the Corporation has made progress. Now that the Corporation has a new accounting system and additional financial management staff, I want to also say that continued improvement is probable. It is OIG's hope that future audits will reveal the effectiveness of these new resources, the achievements made in recent months, the effectiveness of the corrective actions put into place to respond to our findings and recommendations, as well as the Corporation's continued progress.

STATEMENT OF KARYN L. MOLNAR

Senator BOND. Ms. Molnar

Ms. MOLNAR. Thank you, Mr. Chairman and Senator Mikulski.

I am pleased to be here today to testify regarding KPMG's audit of the 1999 financial statements of the Corporation for National and Community Service. My comments will be brief since the overall results of the audit have already been presented during this hearing.

CORPORATION AUDIT

However, it is important to note that our audit of the Corporation's 1999 financial statements was conducted in accordance with generally accepted government auditing standards.

Also, the nature, timing and extent of the audit procedures we performed was based on our assessment of the effectiveness of the Corporation's internal control environment which was in place during fiscal year 1999.

Based on the results of prior year audits and our general knowledge of the Corporation, we determined we could not rely on internal controls to reduce the extent of audit tests for the 1999 audit. Therefore, we performed very extensive detailed tests of the 1999 financial statement account balances.

GENERAL LEDGER SYSTEM

Also during 1999, as you have heard, the Corporation implemented a new general ledger system. The conversion of financial data from the old to the new accounting system, and the training of Corporation personnel in the use of the new system, required a significant commitment of time and resources. The conversion was not completed until near the Corporation's fiscal year end.

Attention focused on implementing the new system within a limited time frame also resulted in a shift of attention away from supervisory review of ongoing financial accounting activity.

Our detailed audit procedures identified certain accounting errors. The Corporation did record all material adjustments that we proposed.

And after all the adjustments were made to the 1999 financial statements, we were able to satisfy ourselves that the statement of financial position was materially correct. However, the Corporation was unable to explain and we were unable to determine the financial statement effect of a $10.5 million unidentified amount reported as an increase in unexpended appropriations. We and the Corporation both believe this is a result of difficulties encountered in the conversion to the new general ledger system.

As a result, our independent auditor's report, which was dated March 3 of this year, included an unqualified opinion on the statement of financial position, and a disclaimer on the other financial

statements. As you know, this is a similar result to last year's report.

INTERNAL CONTROLS

Our review of the Corporation's internal controls over financial reporting revealed that significant progress had been made in addressing the prior year reportable conditions. Our evaluation of internal controls considered the extent of those improvements which had a direct and material effect on the Corporation's financial operations during 1999.

However, the new general ledger system, as I said, was in use for less than 1 month in 1999. A new Chief Financial Officer, and other new financial management personnel, did not assume their duties until after September 30, 1999. And other improvements in policies and procedures which were in the development or "pilot-testing" stage during 1999 did not become fully operational until fiscal year 2000.

The scope of our 1999 audit procedures did not include tests of the effectiveness of these enhancements to the internal control environment. As a consequence, our report on internal controls included seven reportable conditions, five of which we considered to be material weaknesses. This is three less material weaknesses than reported in 1998.

All of the reportable conditions are discussed in detail in our report, along with our recommendations for improvement.

PREPARED STATEMENT

In conclusion, we do believe the Corporation has made notable progress in achieving its goals of improved financial management. Although much is left to be done, with the concerted effort of the new financial management team, and the successful operation of the new financial accounting system for a full year in fiscal year 2000, we believe the Corporation should be well positioned to demonstrate continued progress in the future.

Thank you.

Senator BOND. Thank you.

[The statement follows:]

PREPARED STATEMENT OF KARYN L. MOLNAR

Mr. Chairman and Members of the Subcommittee: I am pleased to be here today to testify regarding KPMG's audit of the 1999 financial statements of the Corporation for National and Community Service.

REPORT ON FINANCIAL STATEMENTS

Our audit of the Corporation's 1999 financial statements was conducted in accordance with generally accepted government auditing standards. Those standards require that the audit be planned and performed to provide reasonable assurance that the financial statements are free of material misstatement. Audit procedures are performed on a test basis to obtain evidence to support the amounts and disclosures in the financial statements. They are also performed to determine whether the accounting principles used are proper, and significant estimates made by management are reasonable in the circumstances. An audit must also determine if the information in the financial statements is presented in a meaningful manner for the intended users.

The nature, timing and extent of audit tests to be performed depends on how much reliance an auditor can place on the internal controls established by management. Internal controls are designed to provide reasonable assurance that trans-

actions are executed in accordance with laws and regulations; that assets are safeguarded against loss from unauthorized acquisition, use or disposition; and that transactions are properly recorded, processed, and summarized to permit the preparation of financial statements in accordance with generally accepted accounting principles. If internal controls are effective, the amount of detail testing can be reduced. If they are not effective, extensive detail testing is required to become satisfied as to the fair presentation of the financial statement amounts.

Our initial assessment of the Corporation's internal control environment in place during fiscal year 1999 was based on the results of our 1997 and 1998 audit procedures. That assessment indicated that we could not rely on internal controls to reduce the extent of audit tests for the 1999 audit. Therefore, we again planned and performed very extensive detailed tests of the 1999 financial statement account balances in order to support our conclusion on the fair presentation of the 1999 financial statements.

Additionally, during 1999, the Corporation converted its legacy financial accounting system to a new general ledger system. The conversion of financial data from the old to the new accounting system, and the training of Corporation personnel in the use of the new system, required a significant commitment of time and resources. The conversion was not completed until near the Corporation's fiscal year end. We believe the attention focused by the Corporation on implementing the new financial accounting system within a limited timeframe, also resulted in a shift of priorities away from supervisory review of ongoing financial accounting activity. Our audit procedures included a review of the conversion process.

Our detailed audit procedures identified certain accounting errors. The Corporation recorded all material adjustments that we proposed. The Corporation also identified, and corrected other accounting errors it noted as a result of the general ledger conversion and the financial statement preparation processes. After all adjustments were made to the 1999 financial statements, we were able to satisfy ourselves that the statement of financial position as of September 30, 1999 was materially correct. However, due to the complexity of the general ledger conversion process, and the lack of an adequate audit trail to support certain adjustments, we were unable to satisfy ourselves as to the propriety of $10.5 million reported as an increase in unexpended appropriations for the year ended September 30, 1999. This unlocated difference is a net amount. The ultimate effect on various line items included on the statement of operations and changes in net position and statement of cash flows, could not be determined.

As a result, our independent auditors' report, dated March 3, 2000, included an unqualified opinion on the statement of financial position, and a disclaimer of opinion on the related statements of operations and changes in net position and cash flows. This is a similar result to that reported in our prior year report on the Corporation's fiscal year 1998 financial statements.

REPORT ON INTERNAL CONTROLS

Our review of the Corporation's internal controls over financial reporting for the fiscal year ended September 30, 1999 revealed that significant progress had been made in addressing the reportable conditions that had been reported in prior years. The most significant progress was noted in the areas of financial systems, with the conversion to a new general ledger system which complies with both Year 2000 and OMB requirements related to federal financial systems, and improvements in the control environment surrounding the National Service Trust. Both of these areas were described as material weaknesses in 1998 and were downgraded to non-material reportable conditions in 1999. Significant progress was also made in the areas of financial management and reporting and in the general control environment with the addition of personnel with strong financial management backgrounds and the implementation of a process for self-assessment of management controls. Corporation management also developed an Action Plan for improvements in financial management, and is currently reporting on a regular basis to Congress on the status of the Plan's implementation.

Our independent auditors' report on internal controls over financial reporting considered the extent of improvements made which directly impacted the Corporation's financial operations during 1999. As I mentioned earlier, the general ledger conversion was not completed until near the Corporation's fiscal year end; a new Chief Financial Officer, and other new financial management personnel, did not assume their duties until after September 30, 1999; and other improvements in policies and procedures which were in the development or "pilot-testing" stage during 1999 did not become fully operational until fiscal year 2000. The scope of our 1999 audit pro-

cedures did not include tests of the effectiveness of these enhancements to the internal control environment.

As a consequence, our report on internal controls over financial reporting for the fiscal year ended September 30, 1999 included the following seven reportable conditions, five of which we considered to be material weaknesses. Reportable conditions are significant deficiencies in the design or operation of internal controls that could adversely affect the Corporation's ability to record, process, summarize, and report financial data consistent with the assertions of management in the financial statements. Material weaknesses are reportable conditions in which the design or operation of one or more of the internal control components does not reduce, to a relatively low level, the risk that material misstatements may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions.

—Financial Management and Reporting
—General Control Environment
—Grants Management
—Fund Balance with Treasury
—Net Position
—National Service Trust
—Financial Systems

These matters are discussed in detail in our report, which also includes our recommendations for improvement. All of these matters deserve management's attention. However, in addition to the comments I have already made regarding financial reporting problems encountered during the 1999 audit, I would like to emphasize the following matters:

First, we recognize that the Corporation has begun to take a more proactive approach to ensuring that an effective system of internal control is in place. The Corporation took steps in fiscal year 1999 to survey selected members of management to obtain relevant information to prepare the annual statement on internal accounting and administrative control systems, and plans to expand the survey process in fiscal year 2000. However, it continues to rely heavily on issues being brought to its attention through audits conducted by the Office of the Inspector General and independent auditors. While this practice does provide independent insight into the effectiveness of internal controls at specific points in time, reliance on the work of the OIG and independent auditors to identify and report internal control risks for management's attention does not prevent or routinely detect matters during the year which could result in material misstatements of accounting and budgetary reports or instances of material noncompliance with laws and regulations.

Second, the most significant expenditure of Corporation funding is for grant awards. Grantees are required to expend funds for allowable costs and provide periodic reports to the Corporation to demonstrate programmatic and financial compliance with the terms of the respective grant agreements. The Corporation's ability to effectively monitor grantee financial activity is hampered by the limitations of the current system used to track grant awards because it is not integrated with the new general ledger system. The current grants management system also can not produce reports which would be useful in assisting program managers in monitoring grantee performance. Additionally, our audit procedures revealed that a comprehensive, risk-based internal grants management program for performing grantee site visits to ensure financial and programmatic compliance was not in place during fiscal year 1999. Considering the size of grants awarded to state commissions and certain not-for-profit organizations, we believe implementing such a program should be a high priority for the Corporation.

CONCLUSION

We believe the Corporation has made notable progress in achieving its goals of improved financial management. Although much is left to be done, with the concerted effort of the new financial management team, and the successful operation of the new financial accounting system for a full year in fiscal year 2000, the Corporation should be well positioned to demonstrate continued progress in the future.

I appreciate the opportunity to be here today and would be happy to answer any questions you may have.

Senator BOND. Thank you for your comments, and particularly for your encouraging words about what is going to happen.

I am a little rusty on my auditing, but it sounds to me like you raised some real flags there. And when you say you are looking forward to them doing better in the future, it is kind of like intro-

ducing a Senator for brief remarks. It is kind of the triumph of hope over experience.

INTERNAL CONTROLS

But on the red flags, I mean, you could not rely on their internal controls. And you had to—you had to build the statement that you—you had to construct the statement that you said that you audited? Did you all have to put it together?

Ms. MOLNAR. No, sir. We did not put it together. But as the Corporation prepared their financial statements, they had an unidentified amount that was reported as an increase in their unexpended appropriations. But it could not be identified as to what it represented. That is not a usual kind of an activity to be showing there.

Senator BOND. Well, there were raised a number of questions about it. And I thought, Senator Wofford, we would give you or Mr. Musick an opportunity to respond, any comments you wanted to make about the comments of the OIG or the KPMG.

Senator WOFFORD. My colleagues might like to do that.

Ms. ZENKER. We have looked at the audit report very closely for the last several weeks, as you can imagine. We think that we have made some good progress this past year in putting in our new financial management system. That was our major goal. We accomplished it. It took a lot of work, a lot of effort on our part.

We did it in, what we think, is a record amount of time for a Federal agency. We are very hopeful I think, as are the auditors, that that new system is well positioning us for the changes and being able to produce good auditable statements for 2000.

There are other material weaknesses that we still need to correct. And those continue to be our highest priority in 2000. We provide a monthly report to the Congress on our progress. We would be happy to speak with your staff at any time to give additional information on what we are doing.

Senator BOND. Mr. Musick.

GENERAL LEDGER SYSTEM

Mr. MUSICK. If I might just add, I think one of the comments that was made earlier, we have a new system in place. It takes people time to learn this and to understand it. It might be a general ledger system, but it is what the government requirements are because we purchased it off the shelf that way.

So what we are trying to do right now is to build interfaces of data that we can get in, because we have different people. We have—HHS makes our grant payments. The Agriculture Department makes our salary payments. So we have to bring that data into the system.

And once that is populated, then it is a matter of teaching people how to use reports to get the information they need out of it to manage it. But that is just the learning curve that is going to take a little time.

Senator WOFFORD. Could I make one comment, Mr. Chairman?

Senator BOND. Please.

Senator WOFFORD. If I understand what Ms. Molnar has testified, and has also said to me, the crux as to the clean opinion on

the other two statements was this $10.5 million matter and what was behind it, the extra money that they could not solve.

I heard her say that they and we believe it is a bookkeeping error in the transferring of information, or for whatever reason, from the old system to the new.

Am I right in understanding that if that had been able to be solved, which we hope it will not be a problem again under the new system, there would have been a clean opinion on the other two statements?

Senator BOND. Ms. Molnar.

Ms. MOLNAR. I believe that that is correct. I mean, as a matter of fact, in starting their audit this year, I was very hopeful that we would get to that position, and I was disappointed that we did find an amount that could not be explained. But I do think that the new system should take care of that in the future.

Senator BOND. Senator Mikulski.

Senator MIKULSKI. Thank you.

ORIGIN OF CORPORATION OF NATIONAL SERVICE

You know, some of these issues have been ongoing for some time. And let me go to my questions. When National Service was created—when the Corporation was created, essentially, it had a new Corporation for National Service and it also combined three long service—long-term programs.

Now, I will tell you my—let me tell you my question, because, you see, it—are some of the problems we still have still the lingering effects of trying to merge programs in the past? When we put grand—Foster Grandparents, the Senior Corps, and then that chunk of VISTA in there, that really created an initial hybrid with different accounting systems, et cetera.

In your professional opinion, do you think that like that $10 million, or whatever we keep talking about, is a vestige of that, and we should just take it as a charge, if you will, or something and just get on with it?

Ms. MOLNAR. It is really very difficult to say what that $10 million is. It could relate to the old programs. The Corporation has been working over the last 2 to 3 years to clean up the old programs. And of course, as time passes, a lot of the members that were working under those programs, really it is all—it is going away slowly.

So, yes, it could have something to do with that. It may not. That was the whole problem. If I had known what it was, and if the Corporation had known what it was, then you can correct it and you can have a clean opinion. So——

Senator MIKULSKI. But we might not ever find this out. Do you think we will ever find this out?

Ms. MOLNAR. Well, it was a—the $10 million this year, and we mentioned, you know, an amount last year—and it was not the same amount and probably is not the same problem. Those are current period amounts that are causing the problem. If the system works well for the whole year next year, since both of the financial statements—of the statements of financial position received an unqualified opinion, then the activity for the year really should fall out and be okay.

This was an amount that just did not fall out between the 2 years. And I would hope that, going forward, that will not happen again.

STATE COMMISSION PROGRAM ADMINISTRATION

Senator MIKULSKI. Well, I have both a question of you and—again, Ms. Jordan, you would have made a great National Service volunteer. Both of you would have.

This is a really complicated program. As Senator Wofford has said, it is, what, 900 different programs and the States. And so much of what you rely upon is the relationship with the States.

But here is my question: Are you satisfied with the way we—this goes to the States. Are you satisfied that the financial controls and management mechanisms are in place for our relationship with the States and these 900 programs; or is the weakness also—or is there a weakness in our relationship—the Corporation's relationship with States?

Ms. JORDAN. My office has begun an initiative to review and audit the State commissions. We began that initiative because what we had seen with the National Direct grants indicated that there were problems in more than 50 percent of the National Direct grants.

We have surveyed so far 24 State commissions. We have issued 7 final reports. The conditions that we are finding most often (each commission is different, and the findings vary). But the conditions that we are finding the most often are in fiscal management, fiscal administration of the Federal funds, and monitoring of sub-grantees and AmeriCorps member service hours.

We will report back to you periodically on the results of what we are learning about how the State commissions are using the Federal funding. The mechanism that we have established requires and will result in reports each time. We will submit a summary report to Congress and CNS after we review 18 of the commissions. We have also begun audits of the state commissions, based on risk. Those assessments are coming out of the pre-audit surveys we are doing.

So at this time, I do not have a lot of information, but I do know that there are some conditions that we are finding when we see—when we go out and look at the State commissions.

STATE COMMISSION GUIDELINES

Senator MIKULSKI. Well, I honestly believe that all States wish to comply but, again, States are uneven in their own fiscal management and technology.

And also one of things I would like you to consider as you uncover these issues, really what kind of technical assistance and guiding principles national needs to give the States so that they can comply. I have to believe that all 50 governors want to comply and be spit-and-polish in terms of their records and so on.

But I think we also need to be very clear about what are the expectations, and what are the requirements and, therefore, what technical assistance national needs to provide the States, particularly some that might be at risk.

Ms. JORDAN. We are doing that. Each of our reports includes recommendations to the Corporation, particularly where we find that the guidance is not clear, as well as recommendations to the commission.

So each pre-audit survey results in a report. Each report has recommendations for the Corporation as well as the State commission.

Senator WOFFORD. Wendy Zenker would like to make a brief comment to your question, Senator.

Senator MIKULSKI. Sure.

Ms. ZENKER. And I know we are underscoring "brief." I just wanted to let you know that we have developed State commission administrative standards which we will be happy to share with you, that set forth what the guidelines are, what the criteria are, what State commissions should be doing to manage their funds.

We are going out and reviewing each State commission, using independent reviewers, as well as our own staff. State commissions are participating. They are actively engaged in this. When we produce a report of strength and weaknesses, we provide technical assistance to deal with the weaknesses.

Senator BOND. Thank you.

[CLERK'S NOTE.—The State Administrative Standards submitted by the Agency can be found in the Subcommittee files.]

ADDITIONAL COMMITTEE QUESTIONS

Senator MIKULSKI. Well, I think—I think, then you are on the right track, really, you know.

So that concludes my questions.

Senator BOND. Thank you very much, Senator Mikulski.

Thank you, Senator Wofford, and the other witnesses.

Senator WOFFORD. Thank you.

[The following questions were not asked at the hearing, but were submitted to the Corporation for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO THE OFFICE OF THE INSPECTOR GENERAL

QUESTIONS SUBMITTED BY SENATOR CHRISTOPHER S. BOND

OIG FUNDING

Question. At my request, an additional $2 million in funds were provided in the Senate's VA/HUD bill for your office to review and audit state commissions. Unfortunately, only half of that increase survived conference. Nevertheless, I am interested to hear how these additional funds have been spent and if you have any preliminary findings you can share with us.

Answer. The table below provides information on funding for OIG's state commission reviews and audits. A discussion of preliminary findings follows.

Description	Planned	Committed	Obligated/ expended	Total funding for St. commission surveys and audits
State Commission Pre-Audit Survey Methodology ..	.....	.....	$12,474	$12,474
Pre-Audit Surveys of 24 State Commissions	.....	.....	548,571	548,571
Total Funding from Fiscal Year 1999 Appropriation	.....	.....	561,045	561,045

Description	Planned	Committed	Obligated/ expended	Total funding for St. commission surveys and audits
State Commission Audit Methodology	.....	.....	7,400	7,400
Pre-Audit Survey & Audit of Oregon State Commission	.....	$200,000	34,986	234,986
Audit of the Delaware State Commission	.....	.....	82,926	82,926
Pre-Audit Surveys of 12 State Commissions	.....	300,000	.....	300,000
Audits of 4 State Commissions	$750,000	.....	.....	750,000
Total Funding from Fiscal Year 2000 Appropriation	750,000	500,000	117,912	1,367,912
Total Funding for State Commission Pre-Audit Surveys & Audits	.....	.....	.....	1,928, 957

BACKGROUND

State commissions play an important role in the oversight of AmeriCorps programs and expenditures. The Corporation has indicated that it intends to give them greater responsibility. However, the Corporation lacks a management information system that maintains comprehensive information on its grants, including those to state commissions and subgrantees. Moreover, although the Corporation began state commission administrative reviews in 1999, the Corporation, historically, has not carried out a comprehensive, risk-based program for grantee financial and programmatic oversight and monitoring. It is also unlikely that AmeriCorps programs are subject to compliance testing as part of state-wide audits under the Single Audit Act due to their size relative to other state programs.

CNS OIG has initiated a series of pre-audit surveys intended to provide basic information on the state commissions' operations and funding. The surveys are designed to provide a preliminary assessment of the commissions' pre-award and grant selection procedures, fiscal administration, monitoring of subgrantees (including AmeriCorps Member activities and service hour reporting), and the use of training and technical assistance funds. The surveys are also intended to provide information on other audit coverage that may be afforded by the Single Audit Act requirements. Using this information OIG produces an initial risk assessment. Generally, further OIG audit work and the timing thereof, will be based on the information gathered during the surveys and the risk assessments.

We are issuing a report to the state commission and to the Corporation communicating the results and making recommendations for improvement, as appropriate, for each pre-audit survey as well as each audit that we perform.

STATUS

As of May 31, 2000, we have developed the pre-audit survey methodology and completed field work for all 24 of the state commission in our first round of surveys. We have issued final reports for 12 and draft reports for nine. We plan to issue reports for all 24 by the end of this quarter. We will also perform a cross sectional analysis of the information we have gathered and the related findings and recommendations and then issue a "capping" report summarizing what we have learned.

We have issued a statement of work for pre-audit surveys of 12 additional state commissions and anticipate that these pre-audit surveys will begin in August.

We have developed the methodology for the audits of state commissions and have begun full-scope audits of two state commissions. We plan to initiate the audits of another four state commissions during the final quarter of this fiscal year.

PRELIMINARY RESULTS

We selected the first 24 commissions for survey work intending to cover large and small commissions and commissions that were considered by the Corporation to be well-run and those reputed to be in other categories. Review of the first twelve reports indicates that we achieved the cross section that we were seeking.

Considering the results of the first twelve reviews, we found that three of the 12 commissions have established systems that provide reasonable assurance that pre-award and grant selection procedures, fiscal administration, monitoring of sub-

grantees (including AmeriCorps Member activities and service hour reporting), and the use of training and technical assistance funds are adequate. Our limited survey procedures also revealed that most of the commissions administered an open, competitive process to select national service subgrantees. However, for several state commissions, we identified areas for improvement related to the assessment of applicants' financial systems during the selection process as well as issues related to retention of documentation to support the grant making process. All twelve state commissions had established systems to provide reasonable assurance that training and technical assistance is made available and provided to subgrantees.

On the other hand, we found that fiscal administration and subgrantee monitoring needed improvement at the majority of 12 state commissions. We made recommendations for improvement of policies and procedures for grant and subgranteee fiscal administration in nine of the 12 reports.

Likewise, we recommended improvements in the monitoring processes and procedures at 11 of 12 state commissions. Most often, we were unable to determine the extent and effectiveness of commission monitoring efforts due to lack of adequate documentation. In addition to the specific recommendations addressed to each state commission, we have recommended that the Corporation revise its guidance to state commissions to specify minimum monitoring procedures to be performed, as well as minimum documentation requirements. We also found that eight of the 12 commissions did not routinely obtain and review, or document the review of, subgrantee audit reports—although the audits are required by Federal law and regulations.

Finally, we confirmed our premise that, due to the size of CNS funding compared to that of other Federal agencies, the Single Audit Act audits at the state level are providing little audit coverage of CNS funding. Only two of the 12 commissions had been tested as major programs as defined by OMB Circular A–133, "Audit of States, Local Governments, and Non-Profit Organizations."

RESPONSES BY STATE COMMISSIONS AND THE CORPORATION

We provide drafts reports to the state commission and to the Corporation and consider their responses when finalizing the reports. Each final report includes the responses received. In some cases, the state commissions have disagreed with our reports, but six of the 12 indicated that they have initiated corrective actions in response to our findings and recommendations.

Because we are scheduling commissions for audit based on risk and are somewhat constrained by resources, each of our reports recommends that the Corporation follow-up to see that our recommendations have been appropriately implemented. The Corporation has responded to six of the 12 reports. The Corporation has indicated that they will consider the reports during their administrative monitoring and oversight reviews which are performed on three year cycle. The Corporation's response also indicates that it will request the Commissions to report corrective actions to them on a semiannual basis.

Question. In the Corporation's fiscal year 2001 budget submission, the Corporation states that it has conducted compliance monitoring and oversight visits to six state commission in fiscal year 1999. Do you have an opinion on this?

Answer. In my view, six in fiscal year 1999 is not enough. The Corporation has had a responsibility to monitor its grantees since it was established. Numerous OIG audit reports over the past five years have cited the Corporation's grant oversight as materially weak.

The Corporation initiated its state commission administrative reviews in fiscal year 1999. It plans to perform such reviews on a three year cycle. My office has not routinely been provided with copies of the reports that result from the administrative reviews, nor have we received a schedule that indicates how the Corporation plans to complete the reviews of all state commissions within the three year cycle.

ROLE OF AUDITORS

Question. Ms. Molnar, in response to a question I submitted to you last year, you indicated that KPMG has indicated to the Corporation that you were "available to answer questions and provide technical advice, within reason, on a year-round basis, free of additional charge." You further stated that you would be "willing to work with the Corporation on special projects to assist them in designing and/or implementing corrective actions to the extent such assistance would not impair" your independence. However, last year, you noted that your advice had been sought only on a very limited basis.

Has the Corporation taken you up on your offer more seriously since last year?

What has been your experience with other agencies in this area?

Answer. The Corporation has, from time to time, asked for our advice on certain technical issues. However, requests for such advice during fiscal year 1999 remained relatively limited. Requests for technical advice or assistance were made primarily related to the year-end general ledger closing process and financial reporting matters. For example, we were asked to make an independent review of the process used to prepare the statement of cash flows. We did so and provided our comments to the Corporation regarding the report format and content. Additionally, the Corporation asked for our concurrence with procedures they were planning to use in preparing accounts payable and grant accruals.

KPMG's experience in this area with other agencies varies widely. The level of assistance requested by other agencies depends significantly on the level of accounting expertise contained within the respective agency itself and on the degree to which the agency relies on its own Office of Inspector General (OIG) to provide this assistance internally. In general, agencies try to address routine technical issues on their own, in collaboration with internal OIG personnel, and consult with KPMG on matters only during the regular audit period. In this way, resources for outside contracting can be reserved for any unusual or nonroutine matters that might arise.

CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD

STATEMENT OF DR. ANDREA KIDD TAYLOR, DR.P.H., MEMBER

ACCOMPANIED BY:

DR. PAUL L. HILL, JR., BOARD MEMBER
DR. GERALD V. POJE, BOARD MEMBER
DR. ISADORE ROSENTHAL, BOARD MEMBER

Senator BOND. We would now invite the Chemical Safety Board representatives to come forward.

If you will take your seats, we will now move to the Chemical Safety Board, its first appearance before this subcommittee. We welcome Dr. Andrea Kidd Taylor, who will be presenting testimony on behalf of the board, Dr. Paul Hill, Dr. Gerald Poje, and Dr. Irv Rosenthal.

It will come as no surprise, I trust, that I am very, very troubled by the lack of results from this agency in the past two-and-a-half years and the seemingly chaotic environment that apparently has existed for some time. We did not know about it until we read about the problems in the paper.

Starting up a new agency is a tough task, but to have produced only three reports and not initiate any new investigations in the past year is below the level of acceptable. The board members implemented a new management structure a few months ago and are attempting to make this arrangement functional. We have testimony from GAO today, and which will be made a part of the record, in which they observed that the task the board has identified for this year "are critical ones that the board must accomplish to demonstrate that it is a viable agency."

Frankly, it remains to be seen whether the board, working in the absence of the chairman and using interim operating procedures, can actually accomplish these tasks. At this point, I am not at all convinced that the agency is on a glide path to improved performance. I must tell you that the board members need to demonstrate that they can put their differences aside and bring about cooperation that is essential to the board's future.

To obtain my support for any future appropriations, I need to see improvements in this agency's operations in a timely manner. If this does not happen, I may advocate defunding and disbanding this agency.

With that, I would call on Senator Mikulski for her statement.

[The information follows:]

[General Accounting Office, April 12, 2000]

CHEMICAL SAFETY BOARD REALIGNED MANAGEMENT FACES SERIOUS CHALLENGES

(By David G. Wood)

Mr. Chairman and Members of the Subcommittee: We appreciate this opportunity to provide a statement for the record for use in the Subcommittee's hearing on the

fiscal year 2001 budget request for the Chemical Safety and Hazard Investigation Board (the Board), an independent agency. Currently in its third year of operation, the Board's mission is to enhance the health and safety of the public, workers, and the environment by determining the causes of accidental chemical releases and using these findings to promote preventive actions by the private and public sectors. The authorizing statute provides for five Board members, including a chairperson, all appointed by the President. The staff includes investigators, attorneys, and program analysts. The Board is required to submit its budget request to the Congress and the Office of Management and Budget concurrently. For fiscal year 2001, the Board has requested $9 million, an increase of $1 million over the prior year's funding. However, the President's Budget requests $8 million for the Board.

Mr. Chairman, our statement is based on ongoing work for you and Senator Lautenberg. As agreed with your offices, this work is focused on determining the status of the Board's (1) organization; (2) operations; and (3) efforts to update and develop plans, policies, and procedures for accomplishing the Board's mission. Our statement today reflects our work to date and includes information supplementing our recent testimony for the House Appropriations Committee.[1] We expect to complete our work and issue a final report in June 2000.

In summary, to date we have found the following:

The Board is currently operating under a significantly different organizational structure than was in effect during most of its first 2 years of operation. This new structure requires a majority vote of the Board members for substantive management decisions and delegates some specific responsibilities, such as personnel matters, to individual Board members. The current structure represents an interim solution to address two governance issues: the lack of an appointed chairperson since January 2000 and disagreements concerning the roles of the chairperson and Board members. During the first 2 years of operation, the Chairman had individually made substantive management decisions. In addition, the Board has implemented an organizational realignment that dedicates an increased proportion of the Board's staffing resources to its investigations and safety programs, rather than supporting activities. However, only 7 of the 17 investigative and safety positions are currently filled because of, among other things, difficulties in recruiting qualified staff.

In terms of operations, the Board has made minimal progress in addressing the backlog of incomplete investigations that existed as of April 1999, when we last reported on the Board to this Subcommittee.[2] Specifically, since then, only one of nine outstanding investigations has been completed, and no new investigations were initiated. Most of the Board's current operations and plans are directed at completing its backlog of investigations and the related policies and procedures that support investigations. The Board also plans to initiate two new investigations and one as yet undefined safety study in fiscal year 2000.

The Board has made some progress in developing needed plans, policies, and procedures, such as those for awarding and managing contracts. However, all of the Board's larger contracts ($100,000 or more) were executed before the current contracting policies and procedures were established. According to Board officials, the agency has received limited benefit from some of these contracts. For example, the Board is not currently using—and may never use—an information system that cost about $636,000 to develop. Also, the interim criteria for selecting incidents to investigate are not yet ready for use, and the Board plans to continue to work with external stakeholders representing companies, employees, and the public to refine the process for selecting incidents to investigate. We believe that the Board's initial steps since the management realignment appear to be appropriately targeted to addressing the Board's key problems. However, the success of these steps continues to be hampered by difficulties in hiring and retaining investigators.

BACKGROUND

Chemical incidents—the accidental release of toxic and hazardous chemicals—occur frequently and often have serious consequences. However, according to Board officials, reliable national statistics on the number of accidents, injuries, and deaths do not exist.[3] The Board is an independent agency created under the Clean Air Act

[1] Chemical Safety Board: Recent Organizational Changes and Status of Operations (GAO/T–RCED–00–101, Mar. 2, 2000).

[2] Chemical Safety Board: Status of Implementation Efforts (GAO/T–RCED–99–167, Apr. 29, 1999).

[3] In 1999, the Board compiled statistics from five federal databases, which indicated that about 60,000 chemical incidents occur each year, resulting in about 2,300 injuries and more than 100 deaths. However, the Board recognizes there are serious limitations with these statistics and is developing a plan to determine a more reliable estimate.

Amendments of 1990.[4] The act directs the Board to (1) investigate and report on the circumstances and the probable causes of chemical incidents resulting in a fatality, serious injury, or substantial property damages; (2) recommend measures to reduce the likelihood or the consequences of such accidents and to propose corrective measures; and (3) establish regulations for reporting accidental releases.

The Board has no enforcement authority and a very limited regulatory role. According to a relevant legislative committee report, the Board is modeled after the National Transportation Safety Board, which retained the lead role in investigating transportation-related chemical incidents.

The Board is to consist of five members, including a chairperson, appointed by the President and confirmed by the Senate. The chairperson is the Chief Executive Officer (CEO) of the Board. As of April 2000, the Board has four members but does not have an appointed chairperson.

To accomplish its primary mission, the Board has conducted both full-scale investigations of chemical accidents as well as limited investigations, called reviews. In our April 1999 statement for the record before this Subcommittee, we identified a backlog of incomplete investigations. Furthermore, we determined that significant portions of the Board's actual and planned resources were dedicated to activities, such as external relations, that did not directly support the conduct of its investigations.

STATUS OF THE BOARD'S ORGANIZATION

Recently, the Board changed its management responsibilities and functional alignment to address, among other things, conflicts that had arisen over the roles and responsibilities of the Board members. Specifically, in December 1999 and January 2000, the Board developed interim solutions to important organizational issues regarding the roles and the management responsibilities of the Board members. In addition, changes in functional alignment made in 1999 and early 2000 increased the proportion of staffing resources to be allocated to the Board's primary mission of conducting investigations and reduced staffing allocated for other activities, such as external relations and information technology.

Conflicts Arose Over the Roles and the Responsibilities of Board Members

In 1999, the Chairman and the other members of the Board disagreed over their respective roles and responsibilities for managing the agency. In essence, the Chairman asserted that he had sole control over many significant agency decisions, while the other Board members believed that making these decisions was the collective responsibility of the Board. Consequently, the Board members did not necessarily support the actions taken by the Chairman. For example, they were concerned about the initial fiscal year 2001 budget request the Chairman had sent to the appropriations committees in October 1999 that would have doubled the Board's funding to $16 million.[5] In addition, according to a Board directive, the Chairman and the Chief Operating Officer did not comply with requests from the other Board members for contracting documents that they wanted to review in order to identify the goods and services that had been provided under the contracts.[6]

The Board members asked the agency's General Counsel to provide a legal opinion on the roles and the responsibilities of Board members. In an August 1999 memorandum, the agency's Office of General Counsel concluded that, for a number of important agency functions, there should be at least some amount of shared responsibility between the Chairman and the other Board members. For example, the memorandum concluded that while the Chairman and his staff were responsible for preparing the agency's budget request, it must be approved by the full Board before being transmitted to the Congress and OMB. Similarly, the memorandum stated that while the use and the distribution of the agency's funds for contracting purposes falls within the scope of the Chairman's administrative functions, the exercise of this authority is subject to the oversight of the other Board members.

In October 1999, the Board members accepted the General Counsel's opinion, but the Chairman requested further legal clarification before implementing the opinion. The Chairman interpreted the Board's authorizing statute as giving him authority, as CEO, over a number of agency functions, including all budget and contracting issues, subject to review only by the President and the Congress. In November 1999,

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[4] The Board did not become operational until 1998 because of funding constraints.

[5] On November 16, 1999, the Board members sent a letter to the appropriations committees to state their reservations about the budget request and ask that the Chairman's request be disregarded.

[6] The former Chairman told us that he did not agree with the Board members' assertion that they were denied access to contracting files.

the Board members requested an opinion from the Department of Justice's Office of Legal Counsel on the legal accuracy of the General Counsel's memorandum and agreed to be bound by the opinion.[7] In addition, on December 1, 1999, the Chairman also requested that the Office of Legal Counsel review the Board's authorizing statute to determine the precise roles and responsibilities of the chairperson and the Board, and he agreed to be bound by the Office's conclusion. On the same day, the Chairman and the Board members developed an agreement specifying the interim measures to be taken until the Department of Justice provided its legal opinion. This agreement expanded the roles and the responsibilities of the Board members.[8]

The Board's disagreement about its governance became a matter of public record, reported in newspapers and periodicals. In January 2000, the Chairman submitted his resignation as Chairman and CEO, effective January 12, 2000, but retained his position as a Board member. The President has not appointed a new chairperson, and the Board is currently operating without a chairperson and CEO.

On January 14, 2000, the Board members established and implemented interim operating procedures that delineate their roles and responsibilities whenever the position of chairperson is vacant. The procedures delegate specific responsibilities, such as personnel matters and allocating resources, to individual Board members. In addition, the procedures identify the specific responsibilities, including developing budgets and awarding contracts exceeding $10,000, that require a majority vote of the Board members for approval.

Current Functional Alignment Emphasizes Investigations, but Many Positions Are Vacant

During fiscal year 1999 and the early part of fiscal year 2000, the Board made organizational changes to better carry out its mission. Among other things, the Board increased the proportion of staffing resources to be allocated to its investigative function. However, because of difficulties in recruiting qualified staff, many vacancies exist in the Office of Investigations and Safety Programs. The Board also shifted several key personnel. The former Chief Operating Officer has been assigned to an interim position of special assistant to a Board member, and the General Counsel is assuming the position of Chief Operating Officer in addition to his legal responsibilities. Also, on February 2, 2000, the Board named a staff member to the position of Director of the Office of Investigations and Safety Programs.

Increased Resources Allocated for Investigations and Safety

Currently, the Board has 24 staff, including the 4 Board members and a special assistant to the Board. The Board expects to grow to a staff of 40 by the end of fiscal year 2000, with almost all of the growth in the areas of investigations and safety. Table 1 identifies the Board's offices and staffing allocations, both current and planned.

TABLE 1.—THE BOARD'S CURRENT AND PROJECTED STAFFING LEVELS, BY FUNCTIONAL OFFICE, AS OF APRIL 7, 2000

Office	Current staffing	Projected staffing by the end of fiscal year 2000
Board members and staff	5	[1] 7
Chief Operating Officer	[2] 1	2
Investigations and Safety Programs	7	17
General Counsel	[2] 3	3
External Relations	2	2
Information Technology Services	2	4
Administration	4	5

[7] The former Chairman told us that prior to the November 1999 letter, he sought assistance from White House officials to help resolve the matter. The officials referred him to Justice's Office of Legal Counsel.

[8] On December 1, 1999, Senator Lautenberg sent a letter to the Board stating that his understanding of the statute creating the Board was that it intended the Board as a whole to direct and approve the executive and administrative functions performed by the chairperson.

TABLE 1.—THE BOARD'S CURRENT AND PROJECTED STAFFING LEVELS, BY FUNCTIONAL OFFICE, AS OF APRIL 7, 2000—Continued

Office	Current staffing	Projected staffing by the end of fiscal year 2000
Total	24	40

[1] Currently, the Board has four members and one special assistant. Projected staffing includes the fifth Board member as provided by the Board's authorizing statute.

[2] The head of the Office of General Counsel also serves as the Chief Operating Officer. This individual is included only in the staffing allocated to the Office of General Counsel.

The projected staffing differs markedly from the staffing associated with the Board's budget request for fiscal year 2000. Specifically, in February 1999, the Board expected to grow to a staff level of 60 by the end of fiscal year 2000, compared with current plans to grow to 40 staff.[9] In addition, last year a greater proportion of staff was planned for organizational units that did not directly support the Board's investigative mission. For example, last year, 33 percent of the Board's projected staffing resources at the end of fiscal year 2000 was allocated to investigations and safety programs, compared with the current projections of 43 percent. Currently, the Board plans to allocate two staff to the Office of External Relations compared with the planned allocation of nine staff a year ago.

Vacancies Exist in the Investigations Area

As shown in table 1, 10 of the 17 positions planned for the Office of Investigations and Safety Programs are vacant. Six of the positions are for investigators, and the other vacancies are for two program analysts, one library/researcher, and one administrative assistant. Board officials told us that the vacancies exist because of recruitment difficulties and the loss of two investigators. According to the Board, potential recruits with the requisite chemical safety skills—primarily from the oil and chemical process industries—are highly paid and typically located in areas far from Washington, D.C. Board officials said that it has been difficult to get prospective staff to relocate. In addition, the Board has found that it takes 6 months or longer to recruit and hire staff. This time frame for hiring staff is longer than the Board anticipated. Moreover, according to Board officials, one investigator resigned and another was terminated.

The newly constituted Board has stated its intent to focus on personnel management issues in fiscal year 2000. The Board will concentrate on retaining and retraining current staff and on hiring and training qualified professional staff. Specifically, the Board has identified development of hiring and training plans as priorities for fiscal year 2000.[10] The Office of Personnel Management (OPM) approved the Board's March 17, 2000, request to reinstate through December 2000 special hiring authority (termed Schedule A) that the Board had been granted previously. According to Board officials, this special hiring authority, which it had until December 31, is typically granted to new federal agencies for a limited time period and expedites the hiring process.

In its letter to OPM requesting special hiring authority, the Board stated that it had an urgent need to expedite the hiring of investigative and safety personnel to complete its work backlog. The Board's letter stated that with some of its investigations more than 2 years old, it is under pressure from the Congress, stakeholders, and the public to complete the eight outstanding investigations as soon as possible. The letter acknowledged that the Board could face serious consequences, including the possible loss of funding, if it does not hire the additional staff needed to make substantive progress on its investigative backlog.

In its fiscal year 2001 budget request, the Board acknowledged that it may not be able to achieve its fiscal year 2000 hiring goals. The Board has also acknowledged that the governance problems and the management difficulties stemming

[9] The Board's budget request for fiscal year 2000 was $12.5 million. However, the Congress provided $8 million for fiscal year 2000. This amount does not support the planned staffing growth to 60 staff.

[10] As of March 2000, the Board has identified eight priorities for fiscal year 2000. The other six priorities—completing three investigative reports, revising its investigation protocol and incident selection criteria, and initiating new investigations—are discussed in the following sections.

from them contributed to staff turnover.[11] In addition, the Board believes that more initiatives than the agency could effectively handle were undertaken hastily in its first year of operation in an effort to quickly demonstrate that the Board was meeting its congressional mandate.

STATUS OF THE BOARD'S OPERATIONS

The Board has not made progress in addressing its investigations backlog this past year and has not initiated a new investigation since March 1999. In addition, the more limited review program was terminated because of problems encountered in performing these reviews. The Board plans to initiate two investigations in fiscal year 2000 and four or five investigations each year beginning in fiscal year 2001. Similarly, in fiscal year 2000 the Board plans to initiate a safety study to better understand the nature and causes of specific safety problems that are beyond the scope of any one particular incident under review and another safety study next year. Also, contracting activities have primarily supported information technology and investigations, but according to Board officials, the agency has received limited benefits for some of its contracts. To avoid contracting for work of limited utility, the Board decided to require a majority vote of the Board members to execute small as well as large contracts that is, approval is required for contracts exceeding $10,000.

Progress Has Been Slow in Initiating and Completing Investigations

The Board investigates accidental chemical releases resulting in a fatality, serious injury, or substantial property damage. These investigations often involve extensive site visits, evidence collection, and analytical work. The Board started five full-scale investigations in 1998 and six in 1999, although none have been initiated since March 1999. Of the 11 investigations, 3 from 1998 have been completed. One report has been completed since March 1999.

Draft reports are in process for three investigations that were started in March 1998, April 1998, and March 1999. Completion of these reports by September 30, 2000, represents three of the Board's eight priorities for fiscal year 2000. The Board has not determined what decisions it will make concerning the other five outstanding investigations. Alternatives include developing investigative reports, issuing summary reports, or concluding the investigations without reports. In addition to the personnel issues discussed above, the Board believes one of the causes of the investigations backlog was an over reliance on contractors to investigate accidents. According to the Board, this over reliance on contractors resulted in some poor investigations and reports because of insufficient Board staff or inadequate procedures to monitor the contractors' personnel to ensure their activities met the Board's investigative needs.

In terms of future investigations, the Board plans to initiate two investigations during fiscal year 2000 and four or five investigations each year beginning in fiscal year 2001.

Review Program Has Been Terminated

The more limited review program was developed to provide information to prevent future incidents by using an approach that was less resource-intensive than full investigations. The protocol for these reviews provided for a limited, office-based review of investigative reports prepared by the organizations that responded to the incident. The Board initiated a total of 23 reviews in 1998 and 1999. However, Board officials told us that they effectively terminated this program in July 1999 when they decided to add the factual data about these reviews to an existing incidents database maintained by the Board and that the program was officially terminated in September 1999. This decision was made because of problems encountered in performing these reviews, including the longer-than-anticipated time spent in collecting the information and drafting the reports as well as the possibility of duplicating work done by other government agencies.

Safety Studies Planned

Although they are not among the Board's eight identified priorities for fiscal year 2000, 6 percent of its fiscal year 2000 funding $488,000 and seven percent of the Board's budget request for fiscal year 2001 $670,000 are allocated for special safety studies and technical guidance. The Board plans to use safety studies to better understand the nature and causes of specific safety problems that are beyond the scope of any one incident under investigation. The Board plans to initiate one safety study

[11] In addition to the loss of two investigators, Board officials said that five staff from other offices have resigned from the Board.

in fiscal year 2000 and another in fiscal year 2001. As of March 2000, the Board had not selected the study to be initiated this fiscal year, but officials said it would likely evolve from one of the three investigations to be completed in fiscal year 2000. Board officials said that safety studies selected would likely stem from research needs identified in recommendations developed by the Board in its investigative reports. They indicated they would receive, at a minimum, input from other parties to ensure the studies are useful.

Limited Benefits for Some Contracting Activities

Since it began operations in January 1998, the Board has obligated about $4.7 million to 16 contracts of $100,000 or more.[12] A significant portion—$2.4 million—of these contracting obligations have supported information technology, such as the creation of data systems and databases, compared with $1.4 million for investigative support (see app. I). These activities were contracted before the management alignments in December 1999 and January 2000 and the establishment of contracting policies and procedures in December 1999. Prior to the management alignment, contracting actions were the responsibility of the former Chairman and the former Chief Operating Officer, and the other Board members did not have a role in reviewing or approving contracts. In addition, these contracts were made prior to being directed—in the House conference committee report accompanying the Board's fiscal year 2000 appropriations bill—to spend the preponderance of its resources, including contract resources, on investigations and safety instead of on information technology or external affairs.

According to Board officials, the agency has received limited benefits for some of its contracting activities. For example, the Board is not currently using—and may never use—the $636,000 Incident and Investigation Information System developed by Oak Ridge National Laboratory in 1999 that would catalog information from the Board's accident investigations. The officials said that the investigators and safety program staff who would use this system had limited input into its design. According to Board officials, the system is overly complex and an off-the-shelf database may better meet the Board's needs. While the Board plans to formally evaluate the system to determine its value to the Board, this evaluation is on indefinite hold because of higher priority work for fiscal year 2000.

In addition, Board officials acknowledged that other contracting activities may be of limited value to the Board, such as:

Baseline of Chemical Accidents.—The Board spent more than $450,000 under two contracts to develop a 10-year baseline of chemical accidents. However, the Board believes these statistics have serious data quality limitations and is developing a plan to determine a more reliable estimate of the universe of chemical accidents.

Pressure Relief Systems.—The Board paid about $326,000 for information on pressure relief systems that are used in chemical processing operations. Board officials said that the information from the study appears to be of limited use to them. A Board member stated that while the contract was designed to assist the Board's investigators and safety staff in their work, the contract proposal was not reviewed by the Board members or the safety and investigations staff for design, purpose, and outcomes. As a result, the product is of lesser value than could have been attained if input from the users and the Board members had been obtained. The Board member said that the other pressing priorities have precluded them from completing their review of the information provided under the contract. He said, however, that the agency needs to develop procedures for the internal technical review of goods and services provided to the Board under contracts.

As discussed earlier, Board officials also believe that the agency relied too heavily on contractors to investigate accidents, resulting in some poor investigations and reports. They attribute this primarily to insufficient Board staff or inadequate procedures to monitor the contractors' personnel to ensure their activities met the Board's investigative needs.

In addition, given its limited productivity and workload challenges, we have questions about the Board's use of funds to develop an informational video demonstrating the Board's purpose and activities. To date, the Board has paid $80,000 of the $160,000 obligated in 1998 for the video. One Board member told us that he did not believe it was appropriate to develop a video at this time. In response to our questions about the views.14 of the Board members on the need for a video, he said he would raise this issue at the next meeting of the Board.

In January 2000, to ensure that future contracting activities contribute to their overall goals, the Board approved interim operating procedures that require contracts exceeding $10,000 be approved by a majority vote of the Board members. In

[12] Contracts for office space or telephone charges are not included.

addition, one Board member is assigned the responsibility for supervising the use and expenditure of funds, including authorizing contracts between $2,500 and $10,000. A Board member said that this new policy will provide greater transparency of proposed contracting actions and avoid contracting for work of limited utility to the Board. In addition, the Board is changing the way it uses contracting support for its investigations. Rather than retaining contractors to perform the investigations, the Board is contracting for specific expertise or tests needed for investigations that are led by Board investigators.

STATUS OF THE BOARD'S EFFORTS TO UPDATE AND DEVELOP PLANS, POLICIES, AND PROCEDURES

In our April 1999 statement for this Subcommittee, we identified two concerns about the Board's actions.[13] One concern related to the backlog of investigations and the fact that the Board had not updated its initial business plan to reflect the backlog and examine how to address this problem, for example, by reallocating existing and planned resources. The second concern stemmed from the problems with contracting that developed shortly after the Board began operations. We indicated the need for formal procedures for its staff to follow in awarding and managing contracts. As discussed earlier, the House conference committee report accompanying the Board's fiscal year 2000 appropriations act directed the Board to spend the preponderance of its resources, including contract resources, on investigations and safety instead of on external affairs or information technology. This report also directed the Board to complete, by December 31, 1999, an updated business plan, formal policies and procedures for awarding and managing contracts, and formal procedures for selecting and performing investigations. The Board has made some progress in complying with these directives. Specifically,

On December 27, 1999, the Board issued formal written procedures for awarding and managing contracts. Also, as discussed above, in January 2000, the Board approved procedures that include requiring contracts exceeding $10,000 be approved by a majority vote of the Board members.

On December 27, 1999, the Board issued interim procedures for selecting incidents to investigate and an interim investigative protocol for conducting accident investigations. As of March 2000, the interim selection criteria are being reviewed and thus are not ready for use in selecting incidents to investigate. The Board plans to revise the process for selecting incidents to investigate, continuing to work with stakeholders from industry, public interest groups, government agencies, and labor unions. Similarly, the Board plans to revise its investigation protocol through reviews with stakeholders and external experts on investigative practices. These efforts are among the Board's eight priorities for fiscal year 2000.

The Board requested an extension of time in developing an update to its business plan because of the former Chairman's announced resignation from that position and the related governance issues. This update will be accomplished by the development of strategic and performance plans required by the Government Performance and Results Act. On February 7, 2000, the Board provided a performance plan for fiscal year 2001 along with its budget request for fiscal year 2001. The Board plans to develop a strategic plan by September 2000.

OBSERVATIONS

The governance issues that arose in 1999 limited the Board's ability to effectively address the problems that we identified almost a year ago—the backlog of investigations and the lack of key plans, policies, and procedures to guide this new agency. The Board's initial steps since the management realignments in December 1999 and January 2000 appear to.16 be appropriately targeted to addressing these issues. The priorities the Board has established for (1) hiring and training staff and (2) completing investigations and key policies and procedures to support the selection and conduct of investigations are critical ones that the Board must accomplish to demonstrate that it is a viable agency capable of accomplishing its important safety mission in an efficient and effective manner. Along these lines, the Board's decision to review and approve contracts appears prudent given the amount of money that has been spent on contracting activities without apparent direct or immediate benefit to the Board.

The Board is facing many challenges as it seeks to accomplish a number of important tasks with a limited number of personnel to conduct them. While the Board plans to provide more resources to its investigations and safety programs, it is not clear how the backlog will be addressed or when the agency will be in a position

[13] See footnote 2.

to realistically initiate any new investigations. The Board's progress in these areas is limited by difficulties in hiring and retaining investigators and the need to dedicate some of these resources to other priorities, such as revising accident selection criteria and the investigation protocol and developing its strategic plan. Finally, in our view, initiating a safety study this year does not appear essential to the operations of the Board in the short run—as it seeks to establish its credibility—and will divert resources from its priorities.

SCOPE AND METHODOLOGY

To review the status of the Board's efforts to carry out its mission, we reviewed documents supplied by the Board related to its organization, planning, budgeting, and programs; personnel data; and contract files. We also interviewed Board employees, including Board members, attorneys, and investigators. We discussed the contents of this statement with Board members, the Chief Operating Officer, and other Board staff, who generally agreed with the facts presented. Based on our discussions, we made revisions as appropriate to reflect the clarifications the Board requested. We conducted our work between January and April 2000 in accordance with generally accepted government auditing standards.

CONTACT AND ACKNOWLEDGEMENTS

For additional information, please contact David G. Wood at (202) 512–6111. Individuals making key contributions to this statement included Gregory Carroll, Harriet Drummings, and Christine Fishkin.

APPENDIX I

CHEMICAL SAFETY BOARD CONTRACTS

The Chemical Safety and Hazard Investigation Board has contracted with a number of vendors since it became operational in fiscal year 1998 using contracts, purchases orders, and agreements. The contracts, purchase orders, and agreements of $100,000 or more (excluding those for office space and telephone charges) are identified in table 2. The Board obligated about $4.7 million under these contracts in fiscal years 1998, 1999, and 2000 (up to March 1, 2000). Only one contract over $100,000 has been executed in fiscal year 2000. As of March 1, 2000, total expenditures under these contracts were about $3.5 million. The contracts in table 2 are categorized according to (1) information technology, database, and network support; (2) investigative support; and (3) other activities.

TABLE 2.—TOTAL OBLIGATIONS AND EXPENDITURES FROM JANUARY 1998 THROUGH MARCH 1, 2000, FOR CONTRACTS, PURCHASE ORDERS, AND AGREEMENTS OF $100,000 OR MORE

Vendor	Description [1]	Total obligations	Total expenditures
Information technology, database, and network support			
Oak Ridge National Laboratory (ORNL) [1 2].	Information Technology Infrastructure. Identify functional requirements and develop the Investigation and Incident Notification System to capture information developed and collected from investigations.	$658,000	$636,000
Tri-Data	Establishment of chemical incident baseline and database. Analyze and prepare a summary report on 10 years of data from five federal agencies' databases to establish a chemical incident baseline.	350,000	350,000
ORNL [1 2]	Technical support. Assist the Board with library and research work, and regulatory analyses. Strategic Plan. Assist in the development of a 5-year information technology plan.	332,000	60,000
AAC Associates	Network/Helpdesk Support. Provide a senior engineer and support specialist to cover helpdesk support and local area network support.	308,000	39,000
Bell Atlantic	Internet and Intranet web site. Provide one dedicated staff to develop, manage, and administer the web database.	231,000	223,000

TABLE 2.—TOTAL OBLIGATIONS AND EXPENDITURES FROM JANUARY 1998 THROUGH MARCH 1, 2000, FOR CONTRACTS, PURCHASE ORDERS, AND AGREEMENTS OF $100,000 OR MORE—Continued

Vendor	Description [1]	Total obligations	Total expenditures
Federal Emergency Management Agency.	Internet service. Host, update, and administer the Board's web site and e-mail. Provide a 24-hour, 7 days-a-week communications center.	137,000	137,000
Bell Atlantic	Helpdesk support. Provide helpdesk support and local area network support.	130,000	116,000
General Service	Administration Database support. Provide one dedicated database administrator/developer to develop, manage and administer database requirements, including technical support.	120,000	51,000
Dun & Bradstreet	Baseline study support. Assist the Board in improving the data quality of the five databases used to develop a universe of chemical incidents for 1987 to 1996.	108,000	108,000
Subtotal		2,374,000	1,720,000
Investigative support			
ORNL [1 2]	Investigative support. Assist the Board in conducting several investigation.	1,006,000	799,000
Battelle	Investigative support. Assist the Board in conducting the Sierra Chemical investigation in Nevada.	410,000	385,000
Subtotal		1,416,000	1,184,000
Other activities			
ORNL [1 2]	Study. Develop training program and reference materials on process pressure relief systems since many incidents that occur are due to inadequate assessment, design, and installation of these systems.	300,000	326,000
Bureau of Public Debt	Furniture, equipment and support. Provide furniture and equipment in addition to technical support services and organizational development.	255,000	33,000
Rowland Productions	Informational video. Provide a video to publicize the Board's purpose and activities.	160,000	80,000
National Ground Intelligence Center.	Software development. Develop a civilian version of military intelligence software to help facilities determine where safety systems were prone to failure and how to best address the problems. Initially planned as a multi-year effort, this contract has been suspended.	100,000	100,000
FPMI Communications, Inc	Resources support. Provide a full spectrum of personnel management services, including but not limited to, writing position descriptions and preparing recruiting analyses and recommendations.	100,000	19,000
Subtotal		915,000	558,000
Total		4,705,000	3,462,000

Note: Dollar amounts rounded to the nearest thousand. Obligations over $100,000 for office space and telephone charges are not included.

[1] ORNL conducts work for the Board under one agreement with specific tasks. The Board has been unable to confirm the costs associated with some of the tasks listed in the table. The Board has found discrepancies between the monthly cost reports received from ORNL for work performed on specific tasks and the monthly billing amounts. It is currently attempting to reconcile these differences. For example, expenditures appear to exceed obligations for the task relating to the study on pressure relief systems, but actual expenditures have not yet been confirmed. Because of these problems, on February 15, 2000, the Chief Operating Officer instructed ORNL to stop all work under the agreement temporarily.

[2] All expenditures are as of March 1, 2000, except for Oak Ridge National Laboratory, which is as of March 7, 2000.

Senator MIKULSKI. Well, thank you very much, Mr. Chairman. I know we have a lot of ground to cover with this panel.

I would like to bring to your attention that Dr. Andrea Kidd Taylor is a Marylander and a graduate of our great School of Public

Health at Hopkins. And I know she and the others will bring their views on really how to improve the Chemical Safety and Hazard Board.

I agree the mission of the board is important. And we have to then see really how we are going to implement this mission and how we are going to be able to move forward. So rather than us talking, I think we should move right to the testimony.

Senator BOND. Thank you, Senator Mikulski.

Dr. Taylor.

STATEMENT OF ANDREA KIDD TAYLOR

Dr. TAYLOR. Thank you. Mr. Chairman, Senator Mikulski, I am honored to come before you today representing my fellow board members in support of the U.S. Chemical Safety and Hazard Investigation Board's fiscal year 2001 appropriations request. Seated at the table with me are my colleagues on the Board. To my immediate left and your immediate right is Dr. Paul Hill. To my right, immediate right, Dr. Gerald Poje. And to my far right, Dr. Isadore Rosenthal. My comments are those of the full board.

Mr. Chairman, as I begin my abbreviated remarks on behalf of my colleagues, I ask that the board's previously submitted and more detailed written testimony be entered into the record.

Senator BOND. Without objection, it will be. Thank you.

FISCAL YEAR 2001 REQUEST

Dr. TAYLOR. In fiscal year 2001, the CSB is seeking an appropriation of $9 million, which represents an increase of $1 million over our fiscal year 2000 appropriation. This amount represents the funding necessary for the board to maintain a stable operating program and perform a modest number of incident investigations. It will also allow the board to evaluate and revise its incident selection criteria, investigation protocol, and procedures for tracking recommendations.

In addition, the board will be able to initiate one safety study to complement its investigation and related activities Finally, the increase will permit the board to conduct monthly public meetings and hire two additional staff members in its Office of Investigations and Safety Programs.

The mission of the board is no less critical now than it was in 1990, when it was first created in legislation. Chemical incidents are costly, both in economic and human terms. According to a recent study of more than 14,000 facilities that filed risk management plans under the EPA's new risk management program, less than 10 percent of these facilities reported 1,900 major chemical release accidents over the 5-year period.

CHEMICAL INCIDENT'S COSTS

Nearly 1,900 injuries and 33 deaths to workers resulted from these incidents. Members of the insurance industry have recently estimated direct losses from chemical releases within the purview of the CSB as being about $1 billion per year.

Just 3 months ago, the chairman and chief executive officer of the board resigned his position. This change in management rep-

resented an opportunity for the board to refine its vision, structure and mode of operation to achieve its mission. As a part of the effort, the board is reassessing the manner in which it both defines and performs its mission and concurrently is implementing changes derived from such evaluations.

The mission of the U.S. Chemical Safety and Hazard Investigation Board is to enhance the health and safety of workers and the public and to protect the environment by uncovering the underlying causes of accidental chemical releases and using these findings and supporting research to promote preventive actions by both the private and public sectors.

The mission is accomplished by conducting state-of-the-art investigations, producing high-quality investigation reports, conducting hazard safety and data studies, issuing targeted recommendations, and advocating effectively for these recommendations.

EMPHASIS ON INVESTIGATIONS

As you review the fiscal year 2001 budget request, you will see that it precisely tracks our stated objectives and priorities. The emphasis is on funds and personnel necessary for the conduct of investigations and safety program activities. This emphasis began this year and is carried forward in our fiscal year 2001 budget request.

Specifically in fiscal year 2001, we propose devoting 19.2 work years and just under $4.2 million for incident investigation and related activities. This compares with 10.7 work years and just under $2.5 million in fiscal year 1999. A similar increase in special safety studies and technical guidance is proposed in fiscal year 2001, where 4.1 work years and $670,000 is proposed compared to 1 work year and $284,000 in fiscal year 1999.

We have also decreased the resources devoted to areas not directly supporting the conduct of investigations in the area of technical information and assistance from 4.1 work years and slightly over $1 million in fiscal year 1999 to 2.7 work years and $730,000 in fiscal year 2001.

STRATEGIC PLAN

The CSB is in the process of developing a strategic plan that will describe in detail the goals, objectives and performance measures that will help it attain this goal. In the interim, CSB's annual performance plan sets forth two strategic goals. First, to reduce the reoccurrence of chemical incidents addressed by the board and minimize the adverse effects on life, health and property. Second, to be a progressive 21st century Federal agency, which facilitates the accomplishment of the board's mission.

The specific performance goals associated with these two strategic goals are detailed both in our written testimony and the fiscal year 2001 performance plan, both of which have been previously submitted to the subcommittee.

Following the leadership changes in January of this year, the board restated the board's mission as a basis for restructuring its priorities, this year establishing a better foundation for its activities in fiscal year 2001 and beyond.

In directing more focused activities in fiscal year 2000, the board has adopted eight critical objectives in order to achieve its mission this fiscal year. They are detailed in our written testimony. Our struggles have been offset by significant successes and, of course, lessons learned.

REACTION TO REPORTS

Our completed incident investigation reports and safety study have been widely applauded for their scientific correctness, their readability and usability and applicability and practicality of their safety recommendations. Significantly, we can point to acceptance and use of the safety recommendations by State governors, legislators, trade associations, companies and emergency responders.

For example, on January 7, 1998, two explosions in rapid succession destroyed the Sierra Chemical Company Kean Canyon plant near Mustang, Nevada, killing four workers and injuring six others.

Based on the board's findings, Nevada's occupational safety and health enforcement section, which enforces Federal safety regulations, increased the frequency of safety inspections at explosives facilities. The governor's executive order mandated safety inspections of explosives manufacturing facilities at least twice a year. Furthermore, in May 1999, the governor signed four additional measures aimed at improving safety of facilities where hazardous substances are produced.

On March 27, 1998, one Union Carbide worker was killed, an independent contractor was seriously injured, due to nitrogen asphyxiation. The Hazardous Materials Training Department of the International Association of Fire Fighters, a labor union representing more than 225,000 professional career fire fighters and emergency medical personnel, used the board's report as an interactive case study on its distance learning website.

On April 9, 1998, at the Herrig Brothers Farm in Albert City, Iowa, two volunteer firefighters were killed and seven other emergency response personnel were injured. In response to a CSB recommendation, the National Propane Gas Association improved their emergency response training materials to better address the hazards of BLEVEs, an especially dangerous type of explosion.

In addition, the Fire Service Institute of Iowa State University revised their training program to provide better guidance for responding to BLEVEs. At the request of Congress, the board led a multi-stakeholder special safety study initiative to build awareness of Y2K chemical safety problems.

We collaborated with the chemical industry, particularly small- and medium-sized enterprises, warning them of the potential for Y2K-related computer problems that might lead to an accidental chemical release. The board also testified before Congress.

PREPARED STATEMENT

Mr. Chairman, Senator Mikulski, and members of the subcommittee, this morning and through our written testimony, we have shared with you an assessment of both the board's accomplishments, problems to date. We have charted a new course, guid-

ed by all of the members of the board and supported by professional staff. We have obtained the support of key stakeholders and request the continued support of this subcommittee.

Thank you.

[The statement follows:]

PREPARED STATEMENT OF ANDREA KIDD TAYLOR

Mister Chairman, Senator Mikulski and other Distinguished Members of the Subcommittee: I am honored to come before you today representing my fellow board members in support of the U.S. Chemical Safety and Hazard Investigation Board's (CSB, or the Board) fiscal year 2001 appropriations request. Seated at the table with me are my colleagues on the Board, Dr. Paul L. Hill, Jr., Dr. Gerald V. Poje, and Dr. Isadore Rosenthal. My comments are those of the full Board.

In fiscal year 2001, the CSB is seeking an appropriation of $9 million, which represents an increase of one million dollars over our fiscal year 2000 appropriation.[1] This amount represents the funding necessary for the Board to maintain a stable operating program and perform a modest number of incident investigations. It will also allow the Board to evaluate and revise its incident selection criteria, investigation protocol, and procedures for tracking recommendations. In addition, the Board will be able to initiate one safety study to complement its investigation and related activities. Finally, the increase will permit the Board to conduct monthly public meetings and hire two additional staff members in its Office of Investigations and Safety Programs.

In this testimony, the CSB will present how it plans to responsibly move forward to provide value to the public in contributing to the prevention of chemical incidents and minimization of their effects, and how it has worked towards fulfilling its mission, including its successes and struggles in this regard.

HUMAN AND FINANCIAL COSTS OF INCIDENTS

The mission of the Board is no less critical now than it was in 1990 when it was first created in legislation. Chemical incidents are costly both in economic and human terms. According to a recent study by the Wharton Center for Risk Management and Decision Processes,[2] of 14,500 facilities that filed risk management plans in 1999 under the EPA's new Risk Management Program (RMP) rule 1,145 of these facilities (7.9 percent) reported 1,913 major chemical release accidents over the five-year period from June 21, 1994 through June 20, 1999.[3] A total of 1,897 injuries and 33 deaths to workers/employees resulted from these incidents.

Members of the insurance industry have recently estimated direct losses from chemical releases within the purview of the CSB as being about $1 billion per year.

This information was presented at a Roundtable meeting sponsored by the National Safety Council on October 6, 1999. Discussion by business members after this presentation noted that neither retained company losses (deductibles), losses by companies that were self-insured, or indirect losses were included in this total. If such losses were taken into account the number would be conservatively estimated at least three to four times larger or three to four billion dollars annually. Independent analysis by another insurance company after the October 6th meeting confirmed these loss estimates.[4]

REFINING THE BOARD'S MISSION

Just under two months ago the Chairman and Chief Executive Officer of the Board resigned his position. This change in management represented an opportunity

[1] As stated in its enabling statute, the Board, as an independent agency, is authorized to submit its own budget request directly to the Congress, simultaneously transmitting a copy to the Executive Branch.

[2] P. Kleindorfer, H. Feldman, and R. Lowe. Accident Epidemiology and the U.S. Chemical Industry. Preliminary Results from RMP*Info. Working Paper 00–01–15. Center for Risk Management and Decision Processes. The Wharton School, University of Pennsylvania. Philadelphia, Pennsylvania. 1999.

[3] The RMP rule covers a wide range of industries including chemical manufacturing, petroleum, refining and processing industries, agriculture, pulp and paper mills, food processors, warehouses, and water treatment plants. Facilities are required to submit a risk management plan for processes that fall in one of the covered SIC codes and if the process contains a threshold quantity of one of the regulated toxic or flammable chemicals listed in 40 CFR § 68.130, Regulated Substances for Accidental Release Prevention.

[4] A paper on this work will be presented publicly at an international conference sponsored by the Center for Chemical Process Safety (CCPS) meeting in October of this year.

for the Board to refine its vision, structure, and mode of operation to achieve its mission. As part of the effort, the Board is reassessing the manner in which it both defines and performs its mission, and concurrently is implementing changes derived from such evaluations.

As one of the first steps towards evaluation and improvement, the Board reviewed the mission statement that was created when we began operations in January 1998. The Board considered this evaluation a priority since this statement drives the strategic planning and functional structure of the Board. In revising the mission statement, the Board strove for greater precision in describing its purpose and authority.

The new statement, based on our statutory mandate, is:

Mission statement

The mission of the U.S. Chemical Safety and Hazard Investigation Board is to enhance the health and safety of workers and the public and to protect the environment by uncovering the underlying causes of accidental chemical releases and using these findings and supporting research to promote preventive actions by both the private and public sectors.

How the mission is accomplished

Conduct state-of-the art investigations of carefully selected major incidents involving the accidental release of hazardous chemicals.

Produce high quality, easy-to-read, and timely investigation reports that identify the root and contributing causes of these incidents.

Conduct hazard, safety and data studies designed to complement CSB investigation report and recommendation activities.

Issue well-reasoned and precisely targeted recommendations.

Conduct effective advocacy activity for these recommendations.[5]

BOARD'S MISSION SUPPORTED

We are pleased to report that key stakeholder representatives have issued public statements of support at Board public meetings in December and January. Among those speaking in support of the CSB mission were the American Petroleum Institute, the Chemical Manufacturers Association, the National Association of Chemical Distributors, The Chlorine Institute, the International Union of Operating Engineers, Environmental Defense (formerly the Environmental Defense Fund), and the Working Group on Community Right-to-Know.

We heard and appreciate these expressions of support, but we also took seriously the accompanying statements urging the Board to move beyond its governance dispute to refocus its energies on its mission.

PREVENTING INCIDENTS THROUGH SCIENTIFIC WORK

The purpose of the CSB's investigation of incidents is to prevent future similar events. We do this by focusing scientific scrutiny on the incidents and all of the circumstances preceding them, not merely on laws that may have been broken. We must be familiar not only with the technologies and human factors that apply today, but those that are just emerging or that may be on the horizon. Because the CSB has no enforcement powers, it must conduct an effective advocacy program to generate support for its recommendations and in so doing enhance chemical safety. Prevention of chemical accidents, then, requires the careful application of resources to the conduct of quality scientific investigations, formulation of sound safety recommendations, and effective advocacy in support of them.

FISCAL YEAR 2001 APPROPRIATIONS REQUEST PROPOSES SLIGHT INCREASE

The Board's budget request for fiscal year 2001 is $9,000,000. This represents a 12.9 percent increase over its fiscal year 2000 appropriation of $7,969,600. This amount represents the funding necessary for the Board to maintain a stable operating program and perform a modest number of incident investigations. It will also allow the Board to evaluate and revise its incident selection criteria, investigation protocol, and procedures for tracking recommendations. In addition, the Board will be able to initiate one safety study to complement its investigation and related activities. Finally, the increase will permit the Board to conduct monthly public meetings and hire two additional staff members in its investigation and safety office.

[5] Mission statement adopted by notation vote of the Board on February 4, 2000.

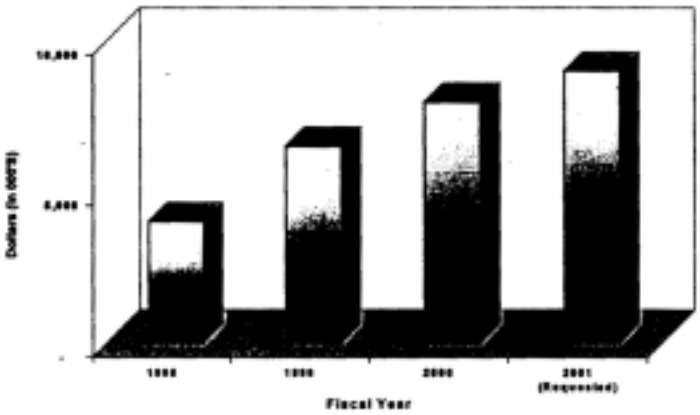

Figure 1, CSB Appropriations, FY 1998 through FY 2001 (Requested)

The requested fiscal year 2001 budget represents a forward-looking vision that recognizes the Board's responsibility to create and demonstrate its value to the public consistent with its mission of enhancing chemical safety. The fiscal year 2001 Budget Justification that was submitted to this Subcommittee last month includes a frank assessment of the CSB's performance to date and the lessons that have been learned from our successes and failures. It also discusses how the CSB plans to implement those lessons and meet current challenges to ready itself for taking on the important tasks identified for fiscal year 2001.

As you examine our fiscal year 2001 budget request you will see that it precisely tracks our restated objectives and priorities. The emphasis is on funds and personnel necessary for the conduct of investigations and safety program activities. This emphasis began this year, and is carried forward in our fiscal year 2001 budget request.

Specifically, in fiscal year 2001 we propose devoting 19.2 workyears and just under $4.2 million for incident investigation and related activities. This compares with 10.7 workyears and just under $2.5 million in fiscal year 1999.

A similar increase in Special Safety Studies and Technical Guidance is proposed in fiscal year 2001, where 4.1 workyears and $670,000 is proposed, compared to one workyear and $284,000 in fiscal year 1999.

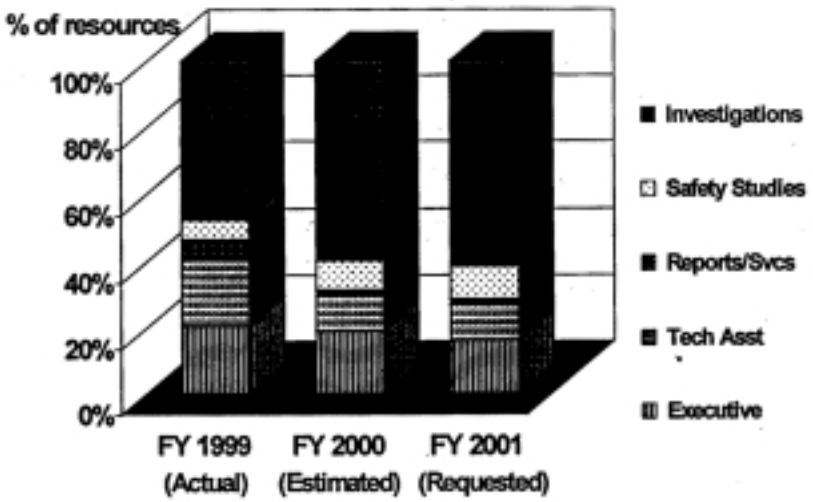

Figure 2, FY 2001 Resources Shifted to Investigations and Safety Studies

We have also decreased the resources devoted to areas not directly supporting the conduct of investigations in the area of technical information and assistance from 4.1 workyears and slightly over $1 million in fiscal year 1999 to 2.7 workyears and $730,000 in fiscal year 2001.

FISCAL YEAR 2001 ANNUAL PERFORMANCE PLAN

The CSB is in the process of developing a strategic plan that will describe in detail the goals, objectives and performance measures that will help it attain this goal. In the interim, the CSB released an Annual Performance Plan that describes how the CSB will make progress toward its long-term goals in fiscal year 2001. The plan sets forth two strategic goals as follows:

Strategic goal 1.—To reduce the reoccurrence of chemical incidents addressed by the Board and minimize the adverse effects on life, health, and property.

Accomplishing the Board's mission depends on the development and application of state-of-the art investigative procedures, well-reasoned and precisely targeted recommendations, production of timely investigation reports, design and completion of complementary safety studies, and interaction with the professional and technical organizations involved in the prevention of accidental chemical releases. Investigative and research efforts need to be focused on those opportunities that will provide the greatest benefit to chemical incident prevention strategies across the broad spectrum of chemical users. As a new investigative agency, development and implementation of our processes and procedures will require ongoing evaluation and improvement to ensure that the resources provided are justified and give value to the public.

Performance goals under this strategic goal include the initiation of four major chemical incident investigations, issuance of two final investigative reports, completion of one safety study, and delivery of at least two technical papers at scientific meetings and/or symposiums involving the leading organizations in the chemical accident prevention arena. In addition, the Board will participate on at least two technical committees involved in the continuous improvement of chemical accident prevention in areas such as incident investigation techniques, chemical process safety, human factors of accident causation, and inherently safer technology.

Strategic goal 2.—To be a progressive 21st century federal agency, which facilitates the accomplishment of the Board's mission.

The Board believes that, if best management practices are emphasized every day throughout every activity, then a professional, efficient, and effective atmosphere will exist where our other program goals can be accomplished. Good management

practices dictate that the organization be well run, competent, technically accurate, flexible, and timely, to ultimately benefit both the employees and the taxpayers.

Performance goals under this strategic goal include attracting and keeping the best and brightest employees, and reducing the time it takes to hire staff and maintain a professional workforce, and promulgating federally required administrative regulations and complying with other legal obligations in administrative areas.

POTENTIAL CONSTRAINTS ON ACHIEVING CERTAIN FISCAL YEAR 2001 GOALS

Infrastructure.—The Board began operations in fiscal year 1998 and anticipated a three-year start-up period. However, limited resources were available for establishing the infrastructure. As a result, the Board projects that at current levels of funding it will not be fully operational for a number of years. Board staff will have to promulgate proposed final regulations, finalize interagency coordination memoranda of understanding (MOU) with other government agencies, evaluate and finalize internal operating procedures, and conduct strategic planning for future program emphasis and resource requirements.

Personnel.—Although the Board will focus on personnel management efforts in fiscal year 2000, the Board may not be able to hire and train all the investigation and safety program staff as planned for fiscal year 2000. Some of the hiring and training activities may continue into fiscal year 2001, and may affect the expected workload in the investigation and related activities function.

Recruiting and hiring qualified investigations and safety programs staff remains one of the Board's most difficult challenges. The small talent pool available for the Board's recruitment needs is primarily found in the oil and chemical-process industries. These potential recruits are highly paid and typically live in areas located far from Washington, DC. The Board, therefore, must now devote extensive time and resources to recruit in order to hire and retain staff with chemical-process safety expertise.

Capacity to conduct investigations of catastrophic incidents.—Because of the difficulty in hiring adequate numbers of qualified technical personnel this fiscal year, the Board likely will not possess adequate resources to launch a new investigation of a major catastrophic chemical incident. Examples of catastrophic chemical incidents are the 1984 chemical release in Bhopal, India, that killed 4,000 within days, and killed or injured thousands of others in subsequent years, or the 1989 petrochemical explosion in Pasadena, Texas that killed 22 and injured more than 80 persons. The total commitment of existing resources, and the acquisition of significant external resources, would be required to undertake such an investigation. Completion of fiscal year 2000 and fiscal year 2001 hiring plans and implementation of training plans will greatly bolster the Board's ability to meet this challenge.

WHAT THE RESOURCES WILL ACHIEVE THIS FISCAL YEAR

In fiscal year 2000 we are concentrating our resources on building our safety and investigations staffs, refining our investigation process and procedures, formalizing training, aggressively recruiting qualified investigators, and limiting the number of new investigations undertaken to a more modest, realistic number. We will not ask for significantly expanded fiscal resources until we can demonstrate the results that you, and we, are both seeking.

Following the leadership changes in January of this year the Board restated the Board's mission as a basis for restructuring its priorities this year and establishing a better foundation for its activities in fiscal year 2001 and beyond. In directing more focused activities in fiscal year 2000, the Board has adopted the following critical objectives in order to achieve its mission this fiscal year:

—Complete two investigation reports.
—Build capacity to launch two new investigations late in the fiscal year.
—Refine the incident investigation protocol and selection criteria for CSB investigations.
—Develop and implement a strategic hiring plan and recruit additional investigations and safety staff to ensure adequate resources to support its investigative work.
—Complete a staff-training plan.
—Initiate one new safety study.
—Complete the Board's Strategic Plan.

CAREFUL SELECTION OF INVESTIGATION PRIORITIES

Investigative and research efforts need to be focused on those opportunities that will provide the greatest benefit to chemical incident prevention strategies across the broad spectrum of chemical users. As a new investigative agency, development

and implementation of our processes and procedures will require ongoing evaluation and improvement to ensure that the resources provided are justified and give value to the public.

In selecting the first two investigation reports to be completed this fiscal year, the Board has chosen those with the most significant safety lessons with wide future applicability. The incidents at Morton International Specialty Chemicals, Paterson, New Jersey, and Tosco Refinery, Martinez, California fit these criteria. The two investigations below allow the Board to pursue this strategy.

Morton International, Paterson, New Jersey.—On April 8, 1998, an explosion and fire occurred at the Morton International, Inc. plant in Paterson, New Jersey. The explosion and fire were the consequence of a runaway chemical reaction that overpressurized a 2000-gallon reactor and released flammable material, which ignited as a result. Nine employees were injured, two seriously, and the plant sustained considerable damage. Chemicals from the reactor were released into the neighborhood.

The Morton incident involved reactive chemicals. Reactive chemicals may be innocuous individually or at room temperature, but may react violently when combined with other chemicals or when heated. Improper handling of reactive chemicals has been the cause of many chemical accidents. Two of the more significant incidents involving reactive chemical explosions in recent years include: the Napp Technologies, Inc. incident in Lodi, New Jersey, that killed five people and injured many others in 1995, and the Georgia-Pacific Resins, Inc. incident in Columbus, Ohio, that killed one worker and injured four others in 1997.

The CSB is examining the following safety issues in the Morton case:

—practices used by the chemical processing industry to evaluate the chemical reactivity of the materials it uses and produces

—design of industrial process equipment for the safe handling of chemical reactivity hazards

—process safety management tools used by industry to address the hazards of reactive chemicals

The CSB is currently finishing chemical testing which will complete its investigative effort. The draft Morton report will then be reviewed by other organizations that participated in investigations of the Morton incident. The CSB anticipates releasing the Morton investigation report by the early summer.

Tosco Refinery Fire, Martinez, California.—On February 23, 1999, a fire occurred at the Tosco Avon Refinery in Martinez, California. Workers were attempting to replace piping attached to a 150-foot tall tower while the process unit was in operation. Process equipment had not been shut down to perform the repair. During the removal of the piping, naphtha was released onto the hot fractionator tower where it ignited. The flames engulfed five workers located at different heights on the tower. Four were killed and one sustained serious injuries.

The piping contained flammable naphtha liquid that was not drained and purged before the work began. Piping was still connected to the system and under process pressure because a closed valve was leaking significantly.

The CSB is examining the following safety issues in the Tosco case:

—formal management decision protocol to assess when maintenance activities can be safely conducted without the shutting down of process equipment

—effective implementation of management oversight of process operations and maintenance activities involving hazardous chemicals

—effective implementation of process safety procedures for maintenance and operations

—consistent implementation of Management of Change procedures in mechanical corrosion control programs

The CSB is currently reviewing Tosco documentation, oil industry good practices and industry regulatory coverage to complete its investigative effort. When the draft Tosco report is completed, it will then be reviewed for factual accuracy by other organizations that investigated the incident. The CSB anticipates releasing the Tosco investigation report by late summer.

NEW INVESTIGATION PROTOCOL AND SELECTION CRITERIA

As the Board builds the new foundation upon which to base its current and future activities, the full and open conduct of its business is one of its core strategies. Frequent public meetings will be an important part of the Board's operations. The first public meeting was held in December 1999, and subsequent meetings were held in January and February 2000.

An important part of maintaining public confidence in CSB investigations is the use of best practice methods in our Investigation Protocol and Incident Selection Criteria that are open to public review and scrutiny by all potential stakeholders.

In December 1999, the CSB completed the development of protocol documents that will be used to organize and direct investigation activities in the future. In our early investigative work, the CSB relied on a Department of Energy protocol that did not provide the focus on root cause analysis that is central to the CSB's mission. We will refine the protocol during fiscal year 2000 through reviews with CSB stakeholders and external experts on investigative practices

The CSB also worked with stakeholders in developing a process that, given the CSB's limited investigative resources, would identify incidents whose investigation would have the greatest potential prevention value. To stimulate stakeholder inputs, the CSB engaged the American Institute of Chemical Engineers' Center for Chemical Process Safety (CCPS) to develop and conduct a survey of industry stakeholders. The CSB also conducted an all-day Roundtable on this subject on November 9, 1999, attended by a wide range of stakeholders from labor unions, public interest groups, and government agencies. The CSB issued criteria for selecting incidents and plans to bring additional stakeholders into public discussion on the key issues to further refine the selection process.

FIRST TWO YEARS OF OPERATION

The CSB was created by the Clean Air Act Amendments of 1990. However, the Board was not funded, and did not begin operations, until January 1998. As the legislative history states: "The principle role of the new chemical safety board is to investigate accidents to determine the conditions and circumstances which led up to the event and to identify the underlying cause or causes so that similar events might be prevented." [6]

Significantly, when operations began in 1998 no personnel or other resources were inherited from other agencies. So, the first two years of the CSB's existence have been characterized by the significant challenges of initiating the operations of a federal agency where none previously existed. There have been notable successes, and, it must be admitted, time-consuming problems, associated with our early development. But our focus has been, and will remain, on the prevention of serious chemical incidents through investigation, scientific study, and effective advocacy of prevention measures.

In an effort to quickly demonstrate that the Board was implementing its Congressional mandate, more investigations, incident reviews, and studies were initiated than could be effectively managed or brought to a timely conclusion. For example, in two years 11 major investigations were authorized, but to date reports have been issued for only three of these investigations. In addition, very substantial Board resources were initially devoted to activities that did not directly support the conduct and completion of investigations.

Under such circumstances and pressures, problems emerged. As a result, in its first two years the Board lost seven senior personnel.

BOARD GROWTH AND DEVELOPMENT

The Board's enabling legislation authorizes five Board Members appointed by the President, by and with the advice and consent of the Senate. One of the Board Members also serves as a Chairperson and Chief Executive Officer. For the first eleven months of operations, the Board only had two Members—a Chairperson and one other Board Member. During this first year, the Chairperson exercised unilateral control over all aspects of the Board's operations. At the beginning of the second year, two additional Board Members joined the Board.[7] However, all substantive Board decisions (except for voting on investigation reports) were still made solely by the Chairperson.

Several Board Members questioned this allocation of decision-making power, and the General Counsel was asked to render an opinion about the proper roles and responsibilities of the Board Members. In August 1999, the General Counsel issued a comprehensive memorandum explaining that, legally, the Board as a whole was to make most substantive decisions, while the Chairperson was responsible for day-to-day management and work assignments and implementing Board policy. In October 1999, three of the Board Members accepted the General Counsel's opinion, but

[6] Senate Report No. 101–228 (page 3615).

[7] The Clean Air Act provides for a Board of five Board Members, one of whom is the Chairperson. At this time only four of the five Members are appointed. A fifth Board Member is needed to assist in the development of the Board.

the Chairperson requested further legal clarification before implementing the opinion. Over the next three months, a conflict with the other Board Members ensued on this issue. Ultimately, the Chairperson resigned his position, and the full Board has requested that the Department of Justice review the General Counsel's opinion. The full Board awaits that opinion. In the meantime, the full Board voted in January 2000 to allocate governing responsibilities among the four Board Members until a new Chairperson is appointed by the President, by and with the advice and consent of the Senate. Thus, all substantive decisions are now made by the full Board.

DISPOSITION OF OPEN INVESTIGATIONS

In addition, in the last year the previous management encountered a series of problems that hindered the Board from developing the institutional framework and processes necessary to ensure efficient and timely production of quality reports and other information. In particular, it encountered difficulties in obtaining an appropriate focus consistent with its limited resources. The Board started fiscal year 1999 with three investigators, all hired at the end of fiscal year 1998, and four major investigations[8] and 14 reviews[9] to complete. In the months leading up to March 1999, the Board proceeded to take on an additional six investigations and nine reviews. In March 1999 the Congress was notified that the CSB was unable to initiate any new investigations. The original vision of the Board had been to utilize contractors to help augment the Board's ability to complete investigation reports; however, difficulties in managing contractors undermined implementation of this concept.

Having over-committed its resources, the Board failed to meet commitments on a number of fronts, in particular in the completion of reports, in launching new investigations, and in establishing appropriate processes and policies for running an efficient and effective government agency. As a result, the Board started fiscal year 2000 with eight on-going investigations.

In July 1999, the Board voted to reallocate investigative resources away from review cases to focus on the eight full CSB investigations. The review case concept was for the CSB to assess the results of investigations conducted by other organizations and publicize the safety lessons learned. The CSB believes that recommendations are better received and produce greater results when backed by the fully researched, full investigation findings in CSB major investigation reports.

BOARD'S CHEMICAL SAFETY ACHIEVEMENTS

Our struggles have been offset by significant successes and, of course, lessons learned. Our three completed incident investigation reports have been widely applauded for their scientific correctness, their readability and usability, and the applicability and practicality of their safety recommendations. Significantly, we can point to acceptance and use of the safety recommendations by state governors, legislators, trade associations, companies, and emergency responders, to name a few. So while we share the concern of others with the quantity of investigation reports, we also share the pride expressed in their quality. That quality is contributing to the enhancement of chemical safety, the prevention of chemical accidents and the fulfillment of our mission.

We have issued three investigation reports and each report has had a tangible impact, in some cases, because one or more recommendations in the report have been accepted and implemented. In many other cases, the reports have spawned educational efforts by other organizations to enhance the safety awareness of specific audiences.

CSB Report 98–001–I–NV, Sierra Chemical Company, Mustang, Nevada. On January 7, 1998, two explosions in rapid succession destroyed the Sierra Chemical Company Kean Canyon plant near Mustang, Nevada, killing four workers and injuring six others.

—Based on the Board's preliminary findings released at its Board of Inquiry, Nevada's Occupational Safety and Health Enforcement Section, which enforces federal safety regulations, increased the frequency of safety inspections at explosives facilities. An Executive Order signed by then-Governor Bob Miller on June 10, 1998, mandated safety inspections of explosives manufacturing facilities at least twice a year.

—Furthermore, in May 1999 Nevada Governor Kenny Guinn signed four additional measures aimed at improving safety at facilities where hazardous sub-

[8] The Board launched two additional major investigations during the month of October, 1998 making a total of six major investigations remaining to be completed as of the end of the month.

[9] The Board initiated one additional incident review during the month of October, 1998 making a total of 15 incident reviews remaining to be completed as of the end of the month.

stances are produced. Signed into law were four bills prompted by the Sierra Chemical Company incident: AB111, that requires employers to provide safety training to their workers in the workers' own language or by a videotape in a language they understand; AB173 and AB535 that both revise standards for regulating facilities where highly hazardous substances are produced, used, stored or handled; and AB 603 that requires a conditional use permit for the same facilities.

—Chemical Health and Safety magazine, a publication of the American Chemical Society, featured the CSB's investigation report as its cover story in its January-February 2000 edition. The publication urged safety professionals to implement the safety recommendations made as a result of such root cause investigations. (See attached Exhibit A.)

—The Hazardous Materials (HazMat) Training Department of the International Association of Fire Fighters (IAFF), a labor union representing more than 225,000 professional career fire fighters and emergency medical personnel, used the Board's report as an "interactive case study" on its Distance Learning website. The exercise requires the user to read a summary of the report and answer questions about responding to a "real-world" hazardous materials incident.

—The Bureau of Alcohol, Tobacco and Firearms uses the report as a case study in its training program for recertification of explosive investigators.

—The Institute of Makers of Explosives (IME), a recipient of Board recommendations, last month informed us that they are currently developing, for approval by their Board of Governors, a set of training guidelines for employees engaged in the manufacture of commercial explosives. Their stated goal is to produce final training guidelines as an IME Safety Library Publication.

NITROGEN AND PROPANE INCIDENTS

CSB Report No. 98–05–I–LA, Union Carbide Corporation, Hahnville, Louisiana, March 27, 1998. One Union Carbide worker was killed and an independent contractor was seriously injured due to nitrogen asphyxiation.

—The Hazmat Training Department of the IAFF also used this report as an interactive case study on its Distance Learning website.

—CSB met with the Confined Space Committee of the American Industrial Hygiene Association (AIHA) and has established an on-going process to discuss the less recognized risks associated with temporary confined spaces and the feasibility of adding warning properties to nitrogen used in confined spaces.

—The Institution of Chemical Engineers (IchemE), based in the United Kingdom, requested and was granted permission by the Board to reprint this report for IchemE members.

CSB Report No. 98–007–I–IA, Herrig Brothers Farm, Albert City, Iowa. Two volunteer fire fighters were killed and seven other emergency response personnel were injured.

—In response to a CSB recommendation, the National Propane Gas Association improved their emergency response training materials to better address the hazards of BLEVEs, an especially dangerous type of explosion.

—Also in response to a CSB recommendation, the Fire Service Institute of Iowa State University revised their training program to provide better guidance for responding to BLEVEs.

—The report was used by a local volunteer fire department's safety officer to successfully challenge the placement of a 14,000-gallon propane tank 50 feet from a new high school and just 10 feet from a roadway. Using the report, and other information, the school board in Hagerman, Idaho, finally agreed that the community did not have adequate emergency responder personnel to effectively control the explosion that would result from such a large propane tank. The town instead decided to install a 2,000-gallon tank as a result.

—A homeowner in Florida also found the report useful in helping to identify concerns about a propane tank planned for installation in his neighborhood.

—A fire chief in Florida indicated that he was using the report (and the CSB's on-line reports of propane incidents) to prepare comments on proposed standards being considered by the National Fire Protection Association. Other emergency responders have indicated that the reported has contributed to ongoing discussions about Boiling Liquid Expanding Vapor Explosions, known as BLEVEs, similar to the one featured in this report.

SPECIAL SAFETY STUDY INITIATIVE ON Y2K

At the request of the (Senate Special Committee on the Year 2000 Technology Problem), the Board led a multi-stakeholder special safety study initiative to build awareness of Y2K chemical safety problems. Among it efforts, the Board collaborated with the chemical industry, particularly small and medium-sized enterprises, warning them of the potential for Y2K-related computer problems that might lead to an accidental chemical release or inhibit automated safety protection and response systems. The Board also initiated diverse activities with Congress and a wide-range of stakeholders, including:

—Testifying before Senate hearings in Washington, D.C. and New Jersey
—Frequent interaction with the President's Council on Y2K Conversion, including presentation at a special roundtable on the chemical sector and a press briefing
—Issuing a Y2K safety alert to the Governors of the 50 states, Puerto Rico, Guam and the U.S. Virgin Islands
—Issuing safety alerts to emergency response organizations, including the International Association of Firefighters, the International Association of Fire Chiefs, the International Association of Emergency Managers, the National Emergency Management Association
—Development of a worker training initiative in partnership with the National Institute of Environmental Health Sciences (NIEHS) and the National Clearinghouse for Worker Safety & Health Training
—Working with a foundation and an academic research center to further characterize the vulnerabilities and status of smaller businesses
—Establishing a Y2K Chemical Safety information clearinghouse on the Board's web site

In June 1999 a working group consisting of the Board, EPA and eight trade associations produced and distributed a pamphlet entitled Addressing Year 2000 issues in Small and Medium-Sized Facilities that Handle Chemicals.

CHEMICAL SAFETY INFORMATION ON THE INTERNET

The CSB's website has proved to be an important avenue for reaching a large and diverse public audience. Few other websites are devoted solely to providing information on chemical incidents and chemical incident prevention. In 1999, Government Executive magazine named the site one of the 16 best federal websites.

The CSB website is intended to serve as a virtual library on chemical safety where safety experts and other stakeholders can do one-stop-shopping to learn more about particular aspects of chemical safety, from the very general to very specific technical works. The Board updates the site daily with new information on chemical incidents, chemical safety publications from various sources, investigation news, links to other sites with chemical safety information, and events related to chemical safety. It also hosts the Chemical Incident Reports Center (CIRC).

The CIRC is a searchable online database of chemical incidents that is intended to enable or inspire actions by a researcher, a government agency or others in support of improving chemical safety. Throughout the day, every day, the CSB receives initial reports about chemical incidents that have occurred around the world. The information comes from the news media, eyewitnesses, companies and others. The sheer volume of incident reports received each day exceeds the investigative resources of the CSB or any other single organization. Yet, through the CIRC database, sharing knowledge of these incidents may make it possible for others to take actions that may contribute to improving chemical safety.

Mr. Chairman, Senator Mikulski, and other members of the Subcommittee: this morning we have shared with you a frank assessment of both the Board's accomplishments and problems to date. While admitting that mistakes have been made in the past two years, we have shown that we have both learned from past errors and have achieved significant accomplishments in fulfillment of the Board's mandate to help prevent accidental chemical releases and protect workers, the public and the environment.

We have charted a new course today, guided by all of the members of the Board, and supported by a professional staff. We have retained the support of key stakeholders, and we request the continued support of this subcommittee. We ask that rather than trust us, you track us as we implement a more focused set of objectives supported by a more disciplined allocation of resources.

INVESTIGATION BACKLOG

Senator BOND. Thank you very much, Dr. Taylor. There is no question that your mission is very important. You have outlined

very persuasively some of the problems and you have talked about the inputs. But I am looking at the GAO reports. The board has not made any progress in addressing its investigations backlog and has not initiated a new investigation since March 1999.

It seems to me we have wasted a tremendous amount of taxpayer funds here. Why should we not just shut the agency down and revert the responsibilities to EPA and OSHA to conduct chemical accident investigations?

Dr. TAYLOR. In response to that, Mr. Chairman, I would like to first say that we are an independent body. And we get the support of all our stakeholders, including the chemical industry, the chemical associations, as well as labor support, as well as public interest groups. And they all support us in our efforts. We are not an enforcement agency. And we conduct root cause investigations.

So in doing that, we perform a different function, I believe, from OSHA or EPA. Having said that—and I understand that we have not conducted any investigations since last year or earlier this year—our plan is to focus on our eight priorities, which I mentioned in my testimony. Those are our hiring plan, completing two investigation reports, launching two new investigations before the end of fiscal year 2000, refining our incident investigation protocol and our selection criteria, developing a strategic hiring plan and recruiting additional investigative and safety program staff, also initiating a new safety study and completing the board's strategic plan.

We have a set of criteria that we want to complete.

Senator BOND. With respect to the management of the agency, how effectively does the joint governance arrangement work?

Dr. TAYLOR. We have had 3 months now, and it seems to be working well. Dr. Poje is responsible for personnel. I am responsible for holding and conducting the public meetings that we hold, as well as our meetings in-house. Dr. Irv Rosenthal is responsible for reviewing the contracts that are $10,000 and below. All other matters come before the full board. And Dr. Hill is responsible for completing the annual reports.

Senator BOND. Dr. Hill, in your view, is the current arrangement functional? Can the agency produce results?

Dr. HILL. There is certainly some question, Mr. Bond. Senator, I do believe that under the original business plan that we developed, there was a fundamental difference in the approach that we are taking now. Certainly we were relying on contract support to complete that backlog of investigations.

The approach now with my colleagues is quite different, relying on all in-house. And as we admit in our testimony, hiring people into the agency has been very difficult in recruiting. Therefore, we are projecting a couple of investigations this year, but, quite frankly, those dates are pushed back further and further as we have experienced problems recruiting those people and getting that done in house.

Senator BOND. Dr. Poje, do you have a comment?

INTERNAL MANAGEMENT CHANGES

Dr. POJE. Senator Bond, thank you. I am in charge of personnel matters. In addition to the board reorganizing, fractionating the job

of the chairman, dividing it amongst the four board members, we also made two very significant changes in the internal management structure.

We appointed a new chief operating officer, elevating our general counsel to that position, and we consolidated two separate programs, the Office of Investigation and the Office of Safety. They are now directed by a single director.

The conduct of the board's past activities in investigation prove the urgency with which we needed to master our own domain. The charging of the task of investigation to contractors from other Federal agencies or in the private sector without internal cohesive guidance from staff fully trained by the board and operating on behalf of the board has proven to take far more time to complete an investigation than we are projecting for the future.

We are onto a course of now hiring internally. We are still using contracted support for specialized services. But we think that this will put us in good stead for the future conduct of investigations. All the hires for the coming year are put into investigation and safety.

With the new director of that program and a comprehensive plan of hiring and performance evaluation, we think we are going to build a department that can actually accomplish the work in a more timely fashion.

Senator BOND. Dr. Poje, let me ask you, it seems to me that you have been hemorrhaging staff departures. And I would ask if you are able to get people on board.

And also, I would ask the broader question to Dr. Taylor: We understand the agency will lapse as much as half of its funding this year. And if we are having problems with personnel departing, and being able to spend the money we appropriated last year, why should we increase your budget next year?

LOSS OF STAFF

Dr. POJE. Senator, this year we actually have lost very recently two staff in the information technology arena. This was an area of early development of the board, that preceded full board accedence in the movement towards that direction. It is my intention, and the intention of the other board members, to put the highest emphasis on safety and investigation programs. And this requires some degree of restructuring. We are evaluating every staff position, and we want to see how those staff positions intersect with the core mission of investigation and safety.

That is something we certainly are not proud of having to do in our third year. But unless we do it, we think we will never be able to achieve the mission of investigating and producing the quality products that I think three to date have demonstrated the value of this board as an independent agency to do.

Dr. ROSENTHAL. Thank you. Mr. Chairman, I think that your initial statement as to the fact that lest the board completed its objectives this year, you would have significant problems. We will——

Senator BOND. One good thing the board has going for it is, we share the same initials. My initials are CSB as well. Outside of that, we have some problems.

Dr. ROSENTHAL. If we had known that, we could have taken credit for great planning.

But we will meet our objectives this year. At the same time, we have to understand, without going back as to who did what to whom or why, the fact that we have failings is an existent condition. I do not believe it is productive to go back into great detail of who did what to whom. We will solve those problems, but you do not solve problems without disruption and some loss.

There is a good reason for not going back to OSHA and EPA. If the board does not do this job properly, my suggestion is you get rid of the board members and start over again. But the original mission, the original reason, for doing this that drove the Congress to create the board remains.

OSHA and EPA are basically agencies that are, by their very nature, looking out to get enforcement. We are an agency that is dedicated to working with the information in the private sector to motivate changes in the basic approach of our country to accidents. So throw us out. Do not throw the law out.

The last comment I wanted to make was that it takes time to correct the condition. We could have acceded to the public demand that you start new investigations. We thought it was better to pause, clean up the investigations we had, recover some value, before we started adding more and more—started investigations, which are just expenses, rather than turning those expenses and those investigations into meaningful recommendations.

Senator BOND. Thank you very much, Dr. Rosenthal. I had kind of suggested that approach to another agency that was here earlier this morning.

Senator Mikulski.

Senator MIKULSKI. Thank you, Dr. Taylor and all of those who participated in this, both testimony and questions and answers. I am really troubled by our situation here, and I was an enthusiastic supporter of creating the board in the 1990-ish clean air amendments.

And I had hoped that it would rise to the stature of the National Transportation Safety Board, that America knows that when a tragedy happens, a thorough investigation will be made and lessons learned will emerge from it. And then advocacy steps can be taken, both voluntarily by the private sector, as well as those of us in the statutory area.

This has not happened. Three years, three investigation reports, no new investigations since February 1999, and a pretty strong GAO report. And I agree, let us not get into the finger-pointing business. But what would be, if we were again talking about getting on track, talking about this committee and that committee and all of this, but if we are going to fund it, even if we follow your recommendations, Doctor, the question is that we have to get results. And the results are not three investigations over 3 years and $18 million. That is $6 million an investigation.

And maybe some investigations cost that. You know, we cannot minimize that investigating chemical accidents is a very sophisticated type of investigation. It is not gumshoe in a tan raincoat. It is really a sophisticated scientist.

ORIGINAL MISSION

So what assurances could you give the subcommittee about steps to be taken to get us on track? What would be the top, say, three to five assurances that we could have that would be in place both short range and long range to be able to follow the original mission?

And Dr. Taylor, I understand you are the voice of the panel today, but it does not have a chairman. And is this one of the issues?

Dr. TAYLOR. I do not think not having a chairman has been one of the issues in the short term. We have been able to operate, I believe, effectively in making progress and the changes that need to be made at the agency with our current structure, as far as governance and who does what in the agency.

As I mentioned, Dr. Poje is responsible for personnel. I am responsible for a task, and so are Dr. Rosenthal and Dr. Hill. And with that, we are hoping that we can progress with our investigation protocol, which we already have, that we want to update and refine. And our plan is that once we have hired the appropriate staff—we do not have enough staff people in our investigations and safety programs, enough competent staff, to actually go out in the field and conduct a strong investigation. And that is where we are starting, with our hiring plan, to really develop that.

And with that, I would like Dr. Poje to come in and give us more information.

Dr. POJE. Senator, if I can say, for the first time the board has detailed time plans for completing three investigations this fiscal year. Those have milestones. The board is regularly reviewing the performance of the staff in the completion of those. And that is the model for any future investigation.

There will be no open-ended single investigator reviewed product coming before the board. It will be part of a management program that has already in place, in the 3 months that we have been operating under this fashion, a regular schedule. We will have a report done in early summer, one in midsummer and one by late summer, is the way we are projecting it right now.

We also have a hiring plan as our highest priority. This is involved in either our office of general counsel, our administrative office and the investigation and safety program, to work closely with a professional contracting agency on personnel matters in the Federal Government, drawing talent and knowledge and skills from the National Transportation Safety Board arena, Defense Nuclear Facility Safety Board arena, to guide us in the development of such a program.

We have milestones that we have established, and we have achieved some. We have returned to a schedule A hiring authority, which will accelerate our ability to get the good people in.

And we have a review process that I have reviewed, that the senior staff has reviewed, for the interviews, the advertisements, for the programs that would lower the hurdles, the relocation programs and policies that would need to be put into place in order to draw in talent coming from the Texas or the California area

where there are concentrations of chemical industries and safety professionals with the skills that this agency needs.

We have time lines for that. And the board meets regularly to review those time lines and to challenge the staff, if we see them out of kilter with our urgent needs for fiscal year 2000, to be assured that we can achieve and merit your consideration for our budget for 2001.

Senator MIKULSKI. Thank you.

I know my time is up. I turn to my colleague.

Senator BOND. Senator Lautenberg.

Senator LAUTENBERG. Thanks, Mr. Chairman. And I regret that I was not here for the earlier hearing to see our friend, Senator Wofford, who works very hard at his job. And I regret I was unable to hear the testimony earlier.

But I listened with interest here. And as I read the GAO report, Mr. Chairman, Senator Mikulski, the fact of the matter is I think that I have probably been one of the strongest advocates for this board and function. I come from the City of Paterson, New Jersey. I was born in a city that has a lot of chemical operations within it, some of it illustrious and some of it dismal in terms of what happened with staff, with employees, over the years.

BEHIND SCHEDULE

And though I see in the GAO report—and I thank Dr. Kidd for—Dr. Taylor, I am sorry—for your presentation. I think it was very good. But the fact of the matter is that we are terribly, terribly behind. And I know the chairman admonished the board and the organization for its lack of activity to get the job going, the too few investigations.

I mean, if someone looked at this picture from the outside, one would say that it presents a picture of squabbling and disorientation. That is not the kind of thing that either any of you want or that I fought so hard for, and my colleagues here, also.

I want to point out the claim that reliable their statistics are not available. But according to the insurance industry estimate—and I am sure it is available generally—each year there are about 225 people die, 10,000 injured on the job, a billion dollars in direct losses each year, almost $3.5 billion indirectly. And these are horrendous statistics.

And I know that you are taking steps, and I would urge you to speed up the process and do not let yourselves get caught up in a bureaucratic maze of deciding who and where. The fact of the matter is that we are all in this together, you and we here. And if something does not happen positively, I think something awful could happen, because I believe in your functioning. I believe in the mission. I think it is essential.

And I ask you a question that is very specific about an incident in Paterson, New Jersey, one that relates to the Morton Salt Company.

I stood in Lodi, the plant that exploded in 1995. I went up and I made a promise to people, to working people, the union. Labor groups held demonstrations out there, pleading for the lives of these people who were sent back into the building after the fire

had started, and nobody knew what to do. It killed four at the time.

Now in April 1998, I visited another site, which was the Morton chemical plant. I think it used to be called Morton Salt. Nine people injured. And I remember that we toured the plant a couple days later, with members of the Chemical Safety Board. And the board launched an investigation. Is that investigation complete?

Dr. TAYLOR. With reference to Morton Chemical, we plan to at least have the completed draft report ready in June. That is our target date for completing that.

Senator LAUTENBERG. Okay. Let me ask you a question. Is that—we are now talking about 2 years of time. Does that seem slow?

ACCELERATING REPORT SOUGHT

Dr. POJE. Senator, that is not a time that any of us would be proud of or say that that is the direction that we want to move into. We hope we can produce reports at a much more accelerated rate. But we have to have our own trained and competent people overseeing the conduct of everybody in an investigation in order to bring it home in a way that does honor and helps promote the system of safety.

The Morton incident that you have pointed to is—bears a degree of legacy from the Napp incident in Lodi. It was a reactive chemical incident, a very fundamental issue to the system of safety right now. Our sister Federal agencies, EPA and OSHA, are investigating their own competencies in such matters and are looking at the bigger picture of how do we shore up the national system of safety.

This is why the Morton incident is being directed as one of our highest and our next case to come down the line. We have completed the initial draft gathering of the evidence. The material has been reviewed by the company and by the union for confidential business information protections. And we think we are on course right now for framing ultimate recommendations to shore up the bigger system of safety out of that one single incident.

Senator LAUTENBERG. Well, if the chairman will indulge me for just a minute more.

Senator BOND. Sure.

Senator LAUTENBERG. Thank you.

The projected staffing is 40, including the members of the board.

Dr. TAYLOR. Yes.

RECRUITING STAFF

Senator LAUTENBERG. That is the end of the fiscal year, 4 months away, 5 months away from that. And if you could in short form, whomever would like to answer, tell me what is the difficulty—or why is it taking so long, and what is the principal difficulty in getting people to do the job?

Dr. POJE. Part of what we are trying to do right now, Senator, is build a department of investigation and safety. That means you want to have every position identified within a department structure. You want to know what are junior people, what are senior people, what their roles and responsibilities will be. And you want to staff it with people who have expertise and competencies in the

chemical, oil refining industries, those that are at the core business of this board.

That means we have had to develop an advertising plan, which was just launched last week. We have developed a number of procedures to reduce the time and the cost by which we can bring people into the board for interviews. We have to have a procedure under way for the interviewing process.

Collecting resumes is one thing. Going through 150 of them to find the one candidate who you think should be on the board is the challenge that we are going through right now.

We have a management team in place that is doing that. We have already brought in this past week candidates for interviewing, physical interviewing, in our offices. And we have slated a number for next week.

Now we will be working with the trade associations, trade unions, private companies, to get the word out about our hiring needs. And we have a few additional policies that the board as a whole will have to be considering for enhancing the opportunity to draw people from the private sector into Federal service.

Senator LAUTENBERG. Well, you are all talented people. And I would hope that you could move this process. The things, Dr. Poje, that you said now are things that would have applied a year ago. So straighten up and fly right, as I think the chairman earlier said. Otherwise, we are not going to be able to continue your funding.

Dr. TAYLOR. And that is what we plan to do.

Senator LAUTENBERG. Thank you very much.

Senator BOND. Thank you very much, Senator Lautenberg. That was kind of the general drift of my message.

We thank the board. Before closing, let me do say we expect timely completion on final action investigation protocol and selection criteria. That was supposed to have been completed back in December last year. But we agree with you, that you do need to hire people in investigations and safety programs. This is the basis of it. And we will have questions for the record and will be following closely your activities.

Thank you very much for your thoughtful comments today. And we wish you greater success in the future.

Dr. TAYLOR. Thank you.

Senator BOND. Thank you very much.

DEPARTMENT OF THE TREASURY

COMMUNITY DEVELOPMENT FINANCIAL INSTITUTION

STATEMENT OF ELLEN W. LAZAR, DIRECTOR

ACCOMPANIED BY MAURICE JONES, DEPUTY DIRECTOR FOR POLICY AND PROGRAMS

Senator BOND. Now I would call the CDFI panel forward.

Our last panel today consists of Ms. Ellen Lazar, Director of the CDFI Fund, accompanied by Deputy Director for Policy and Programs, Mr. Maurice Jones. And we welcome both of our witnesses today.

The administration's budget request for the CDFI Fund asks for an increase of $30 million, from $95 million for fiscal year 2000 to $125 million for fiscal year 2001. I remain concerned about the amount and purposes of the CDFI funding request, especially as we prioritize the funding needs and the primary programs and activities under this subcommittee.

It will be critically important not only to understand what the Fund has achieved, but also how cost effective and efficient these programs are, especially in comparison to other similar Federal activities.

You heard me today outline the pressing needs elsewhere in this subcommittee, which is going to make it a difficult year. The CDFI Fund has made a greater effort to measure its performance, but its track record is still unclear. And some of its activities appear to overlap with those of other Federal programs designed to revitalize distressed communities.

I am pleased that the fund is working with the Small Business Administration and other agencies to coordinate the work of the Federal Government in the area of micro-enterprise development. It is my hope that the Fund will continue working on this effort and other economic development areas in order to minimize duplicative and overlapping Federal activities, such as those under HUD and NCUA.

With regard to management and operation of the Fund's independent auditors, KPMG have provided an unqualified opinion on its financial statements and reported no material weaknesses. You all are shining stars today in this group. You get the big star.

As we know, the CDFI Fund had a rocky beginning. That seems to be a thing of the past. Ms. Lazar, you and your staff deserve credit for cleaning up mistakes, and I heartily commend you. Thank you for what you have done.

I would also like to hear how well the Fund is meeting its performance goals and objectives through its programs. I am especially interested in the ability of the Fund to monitor and evaluate programs. In past reports, GAO found that your programs emphasized outputs rather than outcomes.

Lastly, I am concerned about the Fund's efforts in addressing distressed communities in rural areas. Many members of this subcommittee share this concern and would like to hear how the Fund has addressed this issue.

Senator Mikulski, any comments on this?

Senator MIKULSKI. Thank you very much. And of course, we want to welcome Ms. Lazar and her team for their testimony. Ms. Lazar is also another system Marylander. You can see we have a lot of talent in this State.

Senator BOND. We would like to put a couple agencies in Missouri, too.

Senator MIKULSKI. Well, the agency is not in, but many of the people who run the agencies are, including men who want to be president. Like Jack Kemp and Alan Keys live in Maryland. Moving right along——

Senator BOND. I would stick with the agency heads.

Senator MIKULSKI. Moving right along, we do look forward to hearing your budget justification. But Senator Bond raises the issue of outputs versus outcomes. And what I am tremendously interested in is your system for oversight to measure what we really are doing in communities.

One of my concerns is that often we have noble goals and push to achieve those goals. And then we have unintended negative consequences. The great passion for creating home ownership, and particularly in engaging the poor in an opportunity structure for home ownership, has resulted in great opportunity for some, but predatory lending and flipping in Maryland in another, for those who game the system.

I am not saying yours have gamed it, but often we push people into home—there are people being pushed into home ownership that were not ready. And it has turned out to be a hollow opportunity for them.

So what we want to do know is: What is the CDFI accomplishing in terms of people's lives and people's communities? But enough said from me. Let us go forward with hearing from you.

Senator BOND. Thank you very much, Senator Mikulski.

Ms. Lazar.

STATEMENT OF ELLEN W. LAZAR

Ms. LAZAR. Thank you. Good morning to all of you, Chairman Bond, ranking member Mikulski. I am Ellen Lazar, the director of the CDFI Fund. And at the table with me is our deputy director for policy and program, Maurice Jones.

For the purpose of time, I will keep my testimony brief. I would ask that the Chair submit my complete written statement for the record.

Senator BOND. Without objection, it will be made a part of the record. We thank you for summarizing it.

Ms. LAZAR. Thank you.

MANAGING FOR RESULTS

Today I would like to highlight the CDFI Fund's programs and management, the impact of the fund's awards on CDFIs in distressed communities, the demand for fund awards for fiscal year

2000, and the fund's priorities for fiscal year 2001. The fund's vision is an American one, which all people have access to capital and financial services.

Our mission is to promote access to capital and local economic growth by directly investing in and supporting CDFIs and by expanded financial service organizations' lending, investment and services within underserved markets.

I am happy to report that for the third consecutive year, the fund received an unqualified audit opinion, which you have already acknowledged. Our independent audit, prepared by KPMG Peat Marwick, contained no material weaknesses nor reportable conditions. Our commitment to strong management has resulted in high levels of productivity for the fund.

CDFI FUND INITIATIVES

The fund has certified over 395 CDFIs in 48 States, the District of Columbia, the Virgin Islands and Puerto Rico. Our funding has helped promote access to capital and local economic growth through the development of community-based lenders and incentives for traditional financial institutions to increase their activities in low income communities.

To date, the fund has provided approximately 375 awards totaling $215 million directly to CDFIs. These award dollars are significantly leveraged by other public and private resources. Most notably, core awardees are required to provide a dollar-for-dollar match of non-Federal funds before they receive their award.

The fund has also provided 274 awards totaling $89 million to banks and thrifts for increasing their investments in CDFIs in distressed communities. This $89 million in awards reflects roughly $1.8 billion in investments that banks and thrifts have made in CDFIs in distressed communities, or over 20 times the amount of the fund's awards.

Even more impressive is the impact that our investments have had on CDFIs in the communities that they serve. We recently administered a survey to all of our 1996 and 1997 core awardees, a total of 71 organizations, to determine the impact of the fund's investments. To date, we have received and analyzed responses from 53 awardees. Together, these 53 organizations received $50 million in assistance from the fund.

Preliminary data indicates that these organizations made $1.5 billion in community development loans and investments, supported as many as 6,200 micro-enterprises and businesses, created or maintained as many as 37,000 jobs, developed or rehabilitated up to 28,000 units of affordable housing, developed or supported up to 745 community facilities, including child care centers, health care centers, charter schools, and job training centers. They have provided business training, credit counseling, home buyer training and other development services to over 33,000 individuals and organizations.

These CDFIs have also strengthened their own capacity to deliver services. Their assets have grown by 119 percent from $643 million in the aggregate before receiving an award to close to $1.5 billion in the aggregate in 1999. The average awardee's client base is 72 percent low income, 59 percent minority, 51 percent female,

55 percent from the central city, 35 percent from rural communities, and 10 percent from suburban communities. Clearly, we are enthusiastic about these results.

In fiscal year 2000, we are experiencing the greatest demand since the inception of the fund. To help meet this demand, we were able to use a small carry-over from fiscal year 1999 to add to the $95 million that you appropriated last year, bringing our total funds available to $105 million in fiscal year 2000. This $105 million is well below the demand for our programs.

In fiscal year 2000, the fund announced that we would make $50 million available for our Core Program. The fund received $264 million in requests. The fund announced that we would make $6 million available——

Senator MIKULSKI. Could you repeat that number?

Ms. LAZAR. Certainly. We announced that we would make available $50 million for our Core Program. We received $264 million in requests.

We announced that we would make $6 million available for our Intermediary Program and received $9 million in requests. We announced $25 million would be available for the Bank Enterprise Award Program. Our preliminary review of the applications received showed that if the banks complete all of their projected activities, they would qualify for a total of $109 million in awards. We also expect our Technical Assistance Program to be over-subscribed this year.

FISCAL YEAR 2001 BUDGET REQUEST

Each year we have more and more demand for our programs, which brings me to our fiscal year 2001 request. Because we do not anticipate having a carry-over in fiscal year 2001, and because we expect the demand to continue to grow, it is important that the fund receives the President's full request of $125 million in fiscal year 2001.

These funds will be used to continue to meet the high demand for our programs and to cover our related administrative expenses. Within our fiscal year 2001 budget, we have also included some initiatives to reach populations that we want to serve more effectively. Our budget request for 2001 includes a $5 million set-aside to establish training and technical assistance programs that serve Native American, Alaska Native and Native Hawaiian communities. This has evolved from the Native American lending study, which Congress asked us to undertake in our original statute.

Furthermore, in fiscal year 2001 we intend to continue our outreach to rural areas that are not adequately served by CDFIs. Already in fiscal year 2000, we have conducted either live or by satellite information sessions in 55 rural communities, two-and-a-half times the number reached in fiscal year 1999.

Finally, we plan on making additional innovations in our programs that will enable us to better serve small and emerging CDFIs and respond to last year's conference report language encouraging us to develop programmatic initiatives that serve this market.

CONCLUSION

In conclusion, the fund is being managed effectively, as evidenced by our clean audit and by marked improvement in the disbursements of funds. The fund is committed to supporting CDFIs in the distressed communities that they serve and is demonstrating a significant effect upon their operations. Fund programs are over-subscribed to the extent that we cannot fully support the needs of many qualified institutions.

PREPARED STATEMENT

I am hopeful that the subcommittee will approve the President's $125 million budget request for the Fund so that we may continue to work on creating jobs, affordable housing, child care facilities, small businesses and economic revitalization across America.

[The statement follows:]

PREPARED STATEMENT OF ELLEN W. LAZAR

INTRODUCTION

Chairman Bond, Senator Mikulski and distinguished Members of the Subcommittee, it is a pleasure to be before you today to represent the Community Development Financial Institutions (CDFI) Fund. I am Ellen Lazar, the Director of the Fund. Before I begin my testimony, I would like to introduce to you another key member of the Fund who is with me today; Maurice Jones, Deputy Director for Policy and Programs at the Fund.

My testimony today will focus on four major areas: (1) the principles underlying the operations of the CDFI Fund; (2) the Fund's management systems; (3) the performance of the Fund so far; and (4) Fund objectives for fiscal year 2001.

THE CDFI FUND: PRINCIPLES OF OPERATION

The CDFI Fund, working with private sector partners across the country, operates on four basic principles: (1) its programs and initiatives are highly targeted, focusing on areas and individuals inadequately served by conventional financial markets; (2) its funds are recycled within communities in need; (3) its Federal resources leverage private sector and other non-Federal resources into underserved places; and (4) its programs stress performance in the form of both outputs and outcomes.

CDFI Fund programs strive to address gaps in the marketplace by targeting resources to financial institutions that serve individuals and communities that cannot adequately access capital from the traditional marketplace. For example, funds are used to support: (1) small business loan funds that originate loans, sometimes as small as $500, that are difficult for mainstream financial institutions to offer; (2) housing loan funds that provide downpayment and closing costs assistance, subordinated debt, pre-development grants, bridge loans and other sources of financing that increase the supply of affordable housing and enable poor people to get mortgages; (3) community development banks and credit unions that offer Individual Development Accounts, Electronic Transfer Accounts, and other products targeted to underserved populations; and (4) community development venture capital firms whose highly targeted investments facilitate the creation and retention of jobs in distressed areas across America.

To ensure that CDFI funds support institutions serving those most in need, the Fund requires all organizations designated by the Fund as CDFIs to demonstrate that at least 60 percent of their activities are targeted to distressed communities, low-income individuals, or other individuals that have been denied access to mainstream financial services. The Fund further requires that these organizations provide technical assistance and training to their borrowers. This requirement benefits CDFIs as well as their borrowers. CDFIs will enjoy higher rates of repayment and larger returns on their investments, and borrowers will acquire general financial and business skills and develop positive credit histories. As a result, both the CDFIs and the borrowers they serve become more attractive to mainstream financial institutions.

The CDFI Fund's assistance to needy communities supports community and economic development activities for years after the Fund's initial investment. The Fund

requires applicants seeking designation as a CDFI to demonstrate that their predominant business activity is the provision of loans, equity investments, deposit accounts or other sources of capital that can be invested, repaid, and then recycled to other individuals or organizations in need. In addition, the Fund provides investments that directly support the long-term growth and viability of lending-based institutions. Fund awards enable institutions to build their capacity to better administer their programs and provide them with the capital needed to grow their loan funds and make their products more affordable to their borrowers.

The CDFI Fund leverages investments from other public and private institutions. Under several of the Fund's programs, applicants must demonstrate that they have significant community partnerships in place. In addition, certain awardees are required to provide a dollar for dollar match of non-Federal assistance for each dollar of Fund assistance provided. These matching funds come from a variety of sources, including local governments, banks, insurance companies, foundations, individuals and non-profit institutions. The match requirement helps to ensure that the awardee coordinates the use of Fund assistance with other entities in the community, and that these other entities will be involved in supporting the ongoing operations of the CDFI.

The Fund also encourages mainstream financial institutions to invest in CDFIs. Regulated financial institutions may receive awards from the Fund for, among other things, increasing their provision of grants, equity investments, loans, deposits or other investments to certified CDFIs.

The CDFI Fund's programs are designed to achieve maximum community and economic development impact. When a CDFI applies to the Fund for assistance, it must submit a business plan that includes its projected levels of activity and the anticipated impact of these activities upon the community. Prior to receiving a Fund award, an awardee must agree to meet performance standards that are based upon the activities and impacts outlined in its business plan. For example, a housing loan fund that receives an award would have to meet minimal thresholds not only for the number and dollar amount of loans it originates, but also for the number of housing units created as a result of its financing. Similarly, a business loan fund may be monitored based not only upon the number and dollar amounts of loans it disburses, but also upon the number of jobs created or retained by its borrowers. This type of "performance-based monitoring" helps ensure that the Fund is achieving a high degree of community development impact as a result of its investments.

MANAGING FOR RESULTS

I am pleased to report that our independent auditors (KPMG, LLP) provided an unqualified opinion on the Fund's financial statements for the fiscal year that ended September 30, 1999. KPMG's opinion affirms that the Fund's Statements of Financial Position, Operations, and Changes in Net Position and Cash Flow are fairly presented. This marks the third consecutive year in which the Fund has received an unqualified audit opinion. In addition, for the second year in a row, the Fund's independent auditors identified no material weaknesses. Also, the Fund has no reportable conditions. These findings reflect the tireless commitment of the Fund's staff to sustaining and improving upon its internal controls, operating policies and procedures, and awards monitoring.

The Fund continues to comply with the Federal Managers' Financial Integrity Act (FMFIA) and the Federal Financial Management Improvement Act (FFMIA). The Fund's system of internal management, accounting and administrative control has been strengthened and is operating effectively. Enhanced policies and procedures ensure that Fund programs achieve their intended results; Fund resources continue to be used in a manner that is consistent with its mission; and Fund programs and resources are protected from waste, fraud, and mismanagement.

Enhanced internal efficiencies and improved staff capacity have resulted in unprecedented levels of productivity at the Fund. In fiscal year 1999, we selected 260 institutions to receive $112 million in awards, a 32 percent increase in the dollar amount of awards made in 1998. Our carry-over into fiscal year 2000 was approximately $10 million—a nearly four fold reduction from the $36 million carried-over in fiscal year 1999. We anticipate having no carry-over into fiscal year 2001.

As I discussed with the Subcommittee in previous years, the Fund is committed to managing for results. Its mission is to promote access to capital and local economic growth by directly investing in and supporting CDFIs and expanding banks' and thrifts' lending, investment, and services within underserved markets. I would like to highlight some of the progress we have made in achieving this important mission.

CDFI FUND INITIATIVES—PUTTING CAPITAL TO WORK

The CDFI Fund pursues its mission goals through seven initiatives: (1) CDFI Certification; (2) the CDFI Program, which includes the Core, Technical Assistance and Intermediary Components; (3) the Bank Enterprise Award (BEA) Program; (4) the Training Program; (5) Microenterprise Initiatives; (6) Policy and Research Efforts; and (7) the Native American Lending Study/Action Plan.

CDFI CERTIFICATION

To help recognize and support the growing CDFI industry, the Fund reviews the applications of organizations wishing to become Federally certified CDFIs. In order for the Fund to certify an organization as a CDFI, the organization must meet each of the following six criteria:

1. The organization and its affiliates must collectively have a primary mission of promoting community development;
2. The organization must be a financing entity (either an insured depository institution or an institution that principally provides loans or equity investments);
3. The organization must principally serve a target market consisting of distressed neighborhoods, low-income people, or other underserved populations;
4. The organization must provide training or technical assistance in conjunction with its financing activities;
5. The organization must maintain accountability to its identified target market; and
6. The organization must be a non-governmental entity.

There are several potential benefits of CDFI certification. First, certification enables an organization to be eligible to receive assistance from the Fund. Second, certified CDFIs may increase their capital by becoming partners with regulated financial institutions seeking awards from the Fund for investments in CDFIs. Third, CDFI certification may increase an organization's ability to raise funds from sources such as corporations, foundations and state and local governments. Finally, certified CDFIs may receive technical assistance from the Fund and training support from organizations sponsored by the Fund.

To date, the Fund has certified over 380 organizations as CDFIs. These organizations are headquartered in 47 states, the District of Columbia and Puerto Rico. CDFIs include community development banks, community development credit unions, housing loan funds, facilities loan funds, small business loan funds, microenterprise loan funds, multi-bank community development corporations, intermediaries and community development venture capital funds. On average, the Fund certifies approximately 75 new CDFIs each year.

THE CDFI PROGRAM

The CDFI Program has three funding components: Core, Intermediary and Technical Assistance. These three components promote the Fund's goals, articulated in its strategic plan, of strengthening the expertise and the financial and organizational capacity of CDFIs to address the needs of the communities that they serve. The Fund engages in targeted outreach to inform potential applicants to these funding components. The Fund also provides debriefings to applicants that are not selected for awards.

The Core Component builds the financial capacity of CDFIs by providing equity investments, grants, loans or deposits to enhance the capital base—the underlying financial strength—of these organizations so that they can better address the unmet community development needs of their target markets. In addition, under the Core Component, the Fund provides technical assistance grants in order to build the capacity of awardees and maximize the community development impact of the Fund's awards.

The Fund selects awardees that clearly demonstrate private sector market discipline and the capacity to positively impact underserved communities. The Core Component leverages additional private and public sector investments into these same organizations through the Fund's application requirements, particularly the one-to-one non-Federal matching funds requirement.

In fiscal year 1999, the Fund provided 78 Core Component awards totaling over $78 million. This represents an 86 percent increase over the number of Core Awards provided in fiscal year 1998 (42 awards), and a 77 percent increase over the total amount of dollars awarded under the Core Component in 1998 ($44 million). Since inception, the Fund has made approximately 200 Core Awards totaling over $193 million.

On November 1, 1999, the Fund published a Notice of Funds Availability (NOFA) announcing the availability of $50 million in Core Component awards for fiscal year 2000. We expect to make approximately 50–70 awards under this NOFA. The application deadline was January 20, and, as has been the case in every year, we are over-subscribed. The Fund received 160 applications requesting a total of $264 million, over five times the amount of money the Fund announced as available under this program in fiscal year 2000.

The Intermediary Component allows the Fund to invest in CDFIs indirectly, through intermediary organizations that support CDFIs and emerging CDFIs. These intermediary entities, which are also CDFIs, generally provide intensive financial and technical assistance to small and growing CDFIs, thereby strengthening the industry's financial and institutional capacity. Like Core awardees, Intermediary awardees are required to obtain matching funds in comparable form and value to the financial assistance they receive from the Fund.

Since inception, the Fund has made Intermediary Awards totaling over $15 million to five different institutions. On November 1, 1999, the Fund published a NOFA announcing the availability of $6 million in Intermediary Component awards for fiscal year 2000. The application deadline for this NOFA was January 18, and the Fund received seven applications requesting over $9 million in assistance.

The Technical Assistance (TA) Component of the CDFI Program was first introduced in 1998. This component builds the capacity of "start-up", young and small institutions. The TA Component allows the Fund to direct relatively small amounts of funds—generally $50,000 or less—to CDFIs that demonstrate significant potential for generating community development impact, but whose institutional capacity needs to be strengthened before they can fully realize this potential. Some typical uses of our TA grants include: achieving operating efficiencies through computer system upgrades and software acquisition; producing internal policies and procedures; evaluating current loan products and developing new ones; and training staff in operations essential to the success of the organization.

In fiscal year 1999, the Fund provided 88 Technical Assistance Component awards totaling over $4 million. This represents a 24 percent increase over the number of TA awards provided in fiscal year 1998 (71 awards), and a 33 percent increase over the total amount of dollars awarded under the Technical Assistance Component in 1998 (approximately $3 million). Since inception, the Fund has made 159 Technical Assistance Awards totaling over $7 million.

On January 4, 2000, the Fund published a NOFA announcing the availability of $4.5 million in Technical Assistance awards for fiscal year 2000. Commencing this year, the Fund will make award decisions regarding fiscal year 2000 TA applications on a rolling basis with four separate application deadlines. In this manner, we hope to expedite both the approval and disbursement of TA awards and give TA applicants more flexibility in terms of when they apply for funds. We expect to issue approximately 80–90 TA awards in fiscal year 2000.

Outreach.—To date, institutions in 47 states plus the District of Columbia, Puerto Rico and the Virgin Islands have received CDFI Program awards. To inform potential applicants about the Fund's programs, the Fund conducts informational workshops throughout the country. In preparation for the fiscal year 2000 round of applications, the Fund conducted 13 Core/Intermediary Component outreach sessions, including one that was broadcast by satellite to 73 locations; and 7 Technical Assistance Component outreach sessions, including one that was broadcast by satellite to 85 locations. The live sessions were held in regions of the country where there are relatively fewer CDFIs, including four sessions specifically targeted to organizations serving Native American populations.

The Fund is particularly interested in reaching out to organizations that provide capital and technical assistance to rural communities. In the past few months, we have conducted, either live or by satellite, information sessions in 55 rural communities—two and a half times the number reached in fiscal year 1999. We will continue to increase our efforts to reach rural communities.

Debriefings.—To further our goal of building the institutional capacity of the CDFI field, we provide debriefings to applicants that were not selected for CDFI Program awards. Applicants are given valuable feedback about strengths and weaknesses of their applications as observed by those community development professionals involved in reviewing their requests for funding. Many of these applicants use the information gathered from the debriefing to build the strength of their operations and to improve their performance. In fiscal year 1999, the Fund provided debriefings to 110 institutions that had been unsuccessful in seeking awards under the fiscal year 1998 funding round. Already in fiscal year 2000, we have provided debriefings to 62 organizations that were not selected to receive an award in fiscal year 1999.

THE BANK ENTERPRISE AWARD PROGRAM

The Bank Enterprise Award (BEA) Program is the principal means by which the Fund achieves its strategic goal of expanding financial service organizations' community development lending and investments. The BEA Program recognizes the key role played by mainstream depository institutions in promoting the revitalization of distressed communities.

The BEA Program provides monetary incentives for banks and thrifts to expand their investments in CDFIs and/or to increase their lending, investment and service activities in distressed communities. BEA awards vary in size, depending upon the type and amount of assistance provided by the bank and the activities being funded through the bank's investments. In general, banks that provide equity investments to CDFIs are likely to receive the largest awards relative to the size of their investments.

The leveraging involved in the BEA Program is impressive. To date, 274 awards totaling over $89 million have been announced for banks and thrifts investing in CDFIs and distressed communities throughout the country. This $89 million actually reflects investments in CDFIs and underserved communities of $1.87 billion, over 20 times the amount of the Fund's investment. To date, banks and thrifts receiving BEA awards have provided $439 million directly to CDFIs, and $1.43 billion to distressed communities in the form of direct loans, investments and services.

In fiscal year 1999, as in every year since the program's inception, the Fund increased both the number and the total amount of our BEA awards. In fiscal year 1999, we made 103 awards totaling $31.7 million. This represents an increase of 30 percent over the number of awards made in 1998 (79 awards), and 13 percent over the dollar amount of the awards made in 1998 ($28.1 million).

On September 1, 1999, the Fund published a NOFA announcing the availability of $25 million in BEA Program funds for fiscal year 2000. The application deadline for this NOFA was November 23, 1999. We received 228 applications, a 64 percent increase over the 138 applications that were received in fiscal year 1999. If the applicant institutions complete all of the activities proposed in their applications, we estimate that they would be eligible for awards totaling approximately $109 million—over four times the amount of money currently available for the BEA Program.

THE TRAINING PROGRAM

The Training Program, begun in fiscal year 1999, enhances the Fund's ability to achieve its strategic goal of strengthening the organizational capacity and expertise of CDFIs. The Training Program provides funds that support the development and delivery of training products to CDFIs and other financial service organizations engaged in community development finance. Training needs will be addressed via classroom instruction, web-based distance learning, and other electronic formats. In addition, the Fund will explore supporting other types of capacity building training opportunities, including structured internships.

In fiscal year 1999, the Fund initiated its first activity under this program. We undertook a market analysis of the training needs and resources of CDFIs and community-focused financial service organizations. The purpose of the market analysis was to determine: (1) the quality and extent of training available for CDFIs and financial service organizations engaged in community development lending; (2) the training needs of such organizations; (3) impediments to obtaining needed and adequate training for such organizations; and (4) strategies for eliminating those impediments. We recently received the results of this analysis and expect it to inform our future training initiatives.

In fiscal year 2000, the Fund anticipates awarding, through competitive procurement processes, up to $6 million in contracts to entities for the purpose of developing and delivering specific training products to CDFIs and eligible financial service organizations. Funding will be made available to entities that provide training in a number of disciplines, including market analysis, financial projections, program development and organizational development.

Currently the Fund has received and is reviewing proposals from training providers offering the development and delivery of training for three specific areas: preparation of financial projections; preparing a market analysis; and the fundamentals of lending operations. We anticipate that the proposals will result in over $1 million in contracts. Training provided under these contracts will begin this year.

MICROENTERPRISE INITIATIVES

As part of its strategy to democratize access to capital, the Fund works to strengthen the field of microenterprise development and microentrepreneurs. In addition to providing assistance to microenterprise loan funds under the CDFI Program, the Fund administers two initiatives specifically targeting microenterprise organizations and microentrepreneurs: (1) the Presidential Awards for Excellence in Microenterprise Development; and (2) the Interagency Workgroup on Microenterprise Development.

The Presidential Awards for Excellence in Microenterprise Development is an annual non-monetary awards program that recognizes organizations that have demonstrated excellence and leadership in promoting microenterprise development. These awards reflect the Administration's on-going commitment to advancing the role of microenterprise development in enhancing economic opportunities for all Americans—particularly low-income people and others who lack access to traditional sources of credit and business development assistance. By recognizing outstanding organizations, the program promotes "best practices" within the microenterprise development field in the United States and brings wider public attention to the important role of microenterprise development in the domestic economy.

Awards are given to practitioner organizations—entities that provide microentrepreneurs access to credit, training, counseling and technical assistance—for demonstrating excellence in providing access to capital; alleviating poverty; developing entrepreneurial skills; and innovative programming. In addition, organizations that support the effort of practitioner organizations through financial assistance, technical assistance, research, or other activities are eligible for awards for demonstrating excellence in public or private support.

The Fund is co-chairing, with the Small Business Administration, the Interagency Workgroup on Microenterprise Development. The workgroup was established in 1998 to coordinate the work of Federal agencies involved in microenterprise efforts, and to develop a coherent framework for Federal government efforts to promote microenterprise. The Workgroup includes participants from several Federal agencies and departments. It is examining Federal policies that affect the microenterprise field and is harmonizing discrepancies in definitions and reporting standards among Federal programs that support microenterprise development. This year the workgroup expects to publish a policy paper, a matrix of microenterprise programs at the Federal level, a listing of needs of the field, and case studies highlighting examples of microenterprise best practices.

POLICY AND RESEARCH INITIATIVES

The Fund's Policy and Research initiatives focus on three areas: (1) measuring and reporting on the performance of awardees; (2) promoting industry-wide research and development activities; and (3) instituting policies that maximize the effectiveness of the Fund's programs.

Reporting on Performance and Outcomes:

Core Component Survey.—For the second consecutive year, the Fund conducted a survey of its Core Component awardees to determine the impact of these awardees on the communities that they serve. We evaluated only 1996 and 1997 awardees because they have had at least one year to absorb the Fund's investments and put them to work. As of today, we have received and analyzed responses from 53 of 71 organizations. Together, these awardees received $50 million in Fund awards. What has our $50 million helped these institutions to accomplish?

Our preliminary findings demonstrate that these awardees have generated significant community development impact. Since the time of their award, our Awardees have made $1.5 billion in community development loans and investments, which have helped to: create or expand up to 4,123 microenterprises and 2,063 businesses; create or maintain up to 36,718 jobs; develop or rehabilitate up to 28,166 units of affordable housing; and develop or support up to 745 community facilities. These facilities have the capacity to provide child care to as many as 14,255 children, health care to as many as 52,614 patients and education to as many as 8,381 students.

Our credit union and community development bank awardees provided 76,554 checking and savings accounts totaling $126 million in 1999. Seventy six percent (76 percent) of these accounts are held by low-income individuals. These institutions have also provided 372 Individual Development Accounts (IDAs) with deposits totaling $384,000.

Since receiving their Fund awards, the 53 awardees have also strengthened their capacities to deliver products and services to their target communities. Our awardees provided business training, credit counseling, homebuyer training and other de-

velopment services to up to 32,915 individuals and organizations. Their total assets have increased by 119 percent, growing from $685 million in the aggregate before they received their awards to close to $1.5 billion in the aggregate in 1999. The average awardee's client base is 72 percent low-income, 59 percent minority, 51 percent female, 55 percent central city, 35 percent rural, and 10 percent suburban.

Finally, Fund awardees have leveraged significant additional capital. They estimate that an additional $215 million in capital over and above the $50 million raised as part of our 1:1 matching funds requirement can be directly attributed to receipt of a Fund award. In most cases, their community development loans and investments were part of a larger deal. In 1999, for every $1 our awardees loaned or invested in their communities, $1.30 was invested by other entities.

BEA Program Survey.—This past year, the Fund developed a pilot survey and administered it to a sample of 30 banks and thrifts that received BEA awards in 1998. Thus far, we have received responses from 23 institutions. Among other things, the survey asked: (1) how the promise of a BEA award influenced the lending policies or products of the awardee; (2) how the awardee spent its BEA award. We are still collecting and analyzing surveys, but the preliminary findings indicate that the BEA Program is a valuable tool for encouraging banks to increase their community investments.

The pilot survey indicates that the BEA Program has been successful in helping banks to offer more flexible products to organizations and individuals. The vast majority of the respondents reported that the likelihood of a BEA award allowed them to offer or develop products they otherwise wouldn't have. These include longer term, lower interest rate loans; below market rate deposits; and new products such as pre-development loans. Many of the respondents also indicated that the prospect of a BEA award allowed them to offset risks of return, and thus fund projects that they would not have otherwise supported. A majority of respondents also reported that they increased their investments in CDFIs and/or built new relationships with CDFIs as a consequence of participating in the BEA Program.

Twenty-one (21) of the 23 respondents reported that they used their BEA award monies to fund additional community development initiatives. This is an impressive outcome, given that awardees are under no obligation to reinvest BEA Program award funds in this fashion. Many of the respondents reported using their BEA awards to increase their grants and investments in CDFIs and in other non-profit community development organizations. Others used their award money to subsidize below market rate loans to community development institutions and low-income borrowers, or to increase the provision of technical assistance to borrowers.

The Fund is encouraged by the preliminary results of this survey, as well as the response rate we achieved. These findings suggest that the BEA Program is an effective incentive for banks to increase their community development finance activities.

Reporting on Certified CDFIs.—With over 380 organizations certified as CDFIs and new applications for certification arriving regularly, the Fund has information on more CDFIs than any other entity in the country. This past year, the Fund worked with CDFI industry groups to develop a brief questionnaire that will produce aggregate, standardized data from every certified CDFI. This data will enable the Fund to report on the total volume of CDFI lending and investing, portfolio quality, community development impact indicators, capital managed by CDFIs, and basic CDFI financial indicators. As of November 1, 1999, all entities seeking certification or re-certification with the CDFI Fund are required to complete this brief questionnaire.

Promoting Industry-Wide Research and Development.—The Fund has begun working with CDFI industry groups and other major funders to develop an industry-wide research agenda. The Fund has solicited input from practitioners, funders and academics to identify gaps in existing research and will work with the industry to establish a coordinated research program that addresses the needs identified by the industry and its investors. The Fund has also initiated, and will continue to pursue, in-house research activities that examine various aspects of our awardees' work.

Developing Fund Policies.—The Fund is constantly seeking to improve upon its programs and policies to obtain higher levels of efficiency, and to be more responsive to the needs of our applicants and awardees. In 1999, the Fund performed a comprehensive review of its certification and funding processes. The Fund solicited input from applicants and awardees, external reviewers, and Fund staff about ways to improve documents and processes to ensure that they are well coordinated and transparent. With this feedback, the Fund implemented significant revisions to its certification, Core, Intermediary and TA applications, application review criteria, awards closings procedures and reporting requirements. These changes were codified as revised interim regulations, published on November 1, 1999. As a result, ap-

plicants for certification or for funding in fiscal year 2000 and in future years will benefit from more transparent and efficient policies, procedures and application materials.

NATIVE AMERICAN LENDING STUDY/ACTION PLAN

Our Native American Lending Study/Action Plan is intended to stimulate private investment on Native American reservations and other lands held in trust by the United States. The first step in accomplishing this goal is to identify the barriers to private financing in these areas. To this end, the Fund conducted 13 regional workshops across the country. The workshops included participants from Native American communities, financial institutions, Federal and state agencies, and community development organizations. Participants in these workshops identified barriers to investments in Native American communities and developed strategies and actions for eliminating these barriers. The Fund is also administering a national survey to collect additional data from Native American organizations and financial institutions regarding barriers to accessing capital in Native American communities. The products from these workshops and the results of this survey will assist the Fund in completing the Study. It is anticipated that the final report will be submitted to the Congress and the President by the end of this year. This report will contain recommendations regarding policy, legal, statutory and regulatory changes needed to spur more investment within Native American communities.

THE YEAR AHEAD: FISCAL YEAR 2001

The President's fiscal year 2001 budget request includes $125 million in appropriations for the Fund. This request is $30 million above fiscal year 2000 funding levels. Of the $30 million in additional funding requested, the Fund proposes to use $28,360,000 to fund its various programs and $1,640,000 to cover administrative expenses. These additional appropriations will assist the Fund in its efforts to continue to meet the great demand for its programs. In the past, we have addressed this demand with a combination of new appropriations and funds carried over from previous fiscal year appropriations. However, because we do not anticipate carrying over any appropriations into fiscal year 2001, the Fund will need all of the President's fiscal year 2001 budget request to address the demand for its programs.

In every year since the Fund's inception, interest in our programs has increased. This year has been no exception to that rule. In fiscal year 2000, the Fund received 167 Core and Intermediary Component applications requesting a total of $273 million in awards—or 37 percent more than the $200 million requested under these Components in fiscal year 1999. The Fund also experienced a 64 percent increase in the number of BEA Program applications received in fiscal year 2000 as compared with fiscal year 1999. The additional appropriations requested for the Fund by the President's fiscal year 2001 budget will enable the Fund to continue to invest in worthy organizations and proposals at approximately the same rate as it has done up to now.

The Fund is requesting an additional $1.6 million in appropriations for fiscal year 2001 to cover administrative costs. These funds will be used to support 10 new FTE positions and to cover the salary cost of living increase for existing staff. Consistent with our appropriations requests outlined above, we anticipate that most of these new hires will be used to administer Fund programs. Current Fund staff work tirelessly to ensure that the Fund makes prudent investments and that our awards are disbursed in a timely fashion. However, the increasing demand for our programs and a growing portfolio of investments to monitor makes it necessary to hire additional staff. Sufficient staff ensures that we will continue to make sound investment decisions and retain the capacity to monitor the growing number of awardees in our portfolio.

The Fund's budget request for fiscal year 2001 also includes a $5 million set-aside for the purpose of establishing training and technical assistance programs to increase access to capital in Native American, Alaskan Natives and Native Hawaiian communities. The need for this set-aside was identified in the workshops related to the development of the Native American Lending Study/Action Plan. This set-aside would fund educational and other programs that: (1) enable financial institutions currently serving these communities to enhance their capacity to provide access to capital and credit; (2) assist financial institutions contemplating serving these underserved communities to do so; and (3) assist these communities in establishing their own community development financial institutions.

We anticipate making additional innovations in our programs that will enable us to better serve small, emerging and rural CDFIs in fiscal year 2001. We plan to amend our Technical Assistance Component to allow small and emerging CDFIs to

compete for both technical assistance and financial assistance in amounts up to $150,000 to $200,000 per round. This innovation addresses the Small and Emerging CDFI Access Program idea that Congress encouraged the Fund to consider last Fall. We are also looking forward to expanding some of our current research initiatives. We intend to fund a research project this year that examines the feasibility of creating a secondary market for community development loans. Pending the outcome of this study, we hope to be able to fund a secondary market pilot project in fiscal year 2001.

Finally, we anticipate that our nascent Training Program will facilitate the development and delivery of several new training and technical assistance products by 2001. The Fund will solicit bids from prospective developers and providers of training products in fiscal year 2000, with the intent that they will complete their products and make them available to CDFIs and other community development financial service organizations early in 2001.

CONCLUSION

Mr. Chairman and members of the Committee, thank you for giving me the opportunity to provide this information on the Fund's current activities and fiscal year 2001 budget. I am hopeful that this Committee will approve the President's $125 million budget request for the Fund, so that we may continue to work on creating jobs, affordable housing, childcare facilities, small businesses and economic revitalization across America.

Senator BOND. Thank you very much, Ms. Lazar.

Ms. LAZAR. Thank you.

Senator BOND. I mentioned briefly the potential overlap with other agencies. I understand NCUA has requested $1 million in training in technical assistance to assist low income credit unions. At the same time, CDFI is also providing assistance. What kind of coordination and communication do you have with HUD and NCUA on these issues?

Ms. LAZAR. We talk with them quite regularly. Cardell Cooper, who is the assistant secretary at HUD, serves on our advisory board. The advisory board meets three times a year. And we do have an opportunity to talk with him fairly regularly.

We also speak with NCUA on a regular basis on a host of matters. And I will let Maurice continue on.

Senator BOND. Mr. Jones.

Mr. JONES. Thank you. With respect to NCUA, what we have to do by statute is, prior to providing an award to an institution that they regulate, we have to notify them that we are going to make the award, ask them for comments on both the propriety of the award and also the financial and managerial standing of the institution.

They then comment back to us whether they think the award is appropriate, whether the uses of the award will be helpful for the institution, duplicativeness, et cetera.

We do not make the award until we get their approval. If they disapprove, then we go back to NCUA and the institution and try to work out whatever issues are there. And we have to do that by statute.

Senator BOND. Thank you, Mr. Jones. In the testimony and report you talk about the information sessions in 55 rural communities during 2000. Looking at it in detail, though, we saw only 17 of those sessions were in States of less than 2 million, and that was one of the focuses that members of the committee had asked you to make. And of the 55 sites, there were rural poverty areas, like Phoenix, Denver, Cincinnati, Indianapolis, San Antonio and Seattle.

Could you just very briefly talk about the nature of the information sessions and how these sessions address the needs of the rural areas? And do you have any other ideas for addressing those needs?

Mr. JONES. Sure. The info sessions essentially—at the beginning of each round of awards, what we do is we hold information sessions whereby we go through the details of the award round that is applicable. So if it is—let us say it is technical assistance. What we do is we hold educational workshops across the country and through satellite whereby we essentially walk through the applications. We talk about eligibility criteria. We talk about the evaluation criteria.

We give applicants a sense of the timing for the due dates. We give them a sense of timing for the types of awards they can apply for. And most importantly, we engage in a back and forth with them. We answer all of their questions to the extent that we can. And we do this with respect to each of our programs.

With respect to reaching out to more rural areas, several of those video teleconferences were broadcast via the USDA network. So we reached rural areas that way. In addition, we had about 83 sites or so via the video teleconferencing.

What we are doing with respect to trying to reach out further in rural areas, we have already made one change in our regulations. We noticed that our regulations—we had a provision in our regulation that said if you are a rural area, you could qualify if the population loss over a 10-year period were 10 percent.

What that was doing for rural areas, we learned, is it was not accounting for the differences that births and deaths were making. So we added another feature, which allowed rural areas to qualify if the net migration loss was 5 percent over a 5-year period. And we did that as of November 1 of last year. And we will continue to do, as we learn more and more about how our programs affect rural areas, we will continue to try to do those things.

Senator BOND. Thank you very much, Mr. Jones.

I have another question, so I will submit that for the record and turn the questions to Senator Mikulski.

Senator MIKULSKI. Thank you.

First of all, I was delighted to hear about the way the mandate works with coordinating with the credit unions over applications. My question, Ms. Lazar, is: How does CDFI work with community development corporations?

Ms. LAZAR. We work in many ways with community development corporations. The CDFIs that we certify and fund do a lot of their lending and investment activity with CDCs directly. A number of the CDFIs are outgrowths, in fact, of CDCs themselves.

Some of them have separated off their lending and investment activity to establish a CDFI in their community. So they are both working from a lending standpoint and also customers and clients of CDFIs for their development activities.

Senator MIKULSKI. Because in many instances they do not exist in certain areas. I mean, there continues to be a wide gap between the demand for lending and so on.

Let me go then to another issue that Senator Bond and I are tremendously interested in. You have heard one side of the flipping,

the predatory lending where they really gouge the poor. And they are despicable predators. That name is accurate. But of the legacies of predatory lending is FHA or so-called HUD houses in communities that are often wastelands themselves. And in like my own hometown, HUD in some ways is one of the biggest slum landlords, holding boarded up property.

Do you—one of the recommendations Cuomo is considering is giving these houses to community corporations or to cities themselves. I made the comment, you cannot flip to them because in many instances they are poor themselves, particularly the non-profits.

My question is: Do you now play a role in helping deal with FHA disposal properties, with community groups? Do you see a role that CDFI could play if so-called asset zones were created or so on? Because we just do not want to shift HUD's problem on to either a city or a non-profit without resources, because it is going to take us nowhere. And I am wondering what—have you thought about this? Have you heard about this?

Ms. LAZAR. A little bit, actually. A lot of the CDFIs are working on predatory lending issues in their communities. Self-help down in North Carolina has been very active in focusing attention on predatory lending activities in their community. We could certainly spend more time talking about this, but my initial look at this is that CDFIs could play a significant role in helping to facilitate moving the properties out of the HUD portfolio into CDCs, and the CDFIs helping to finance rehabilitation activity and mortgage activity for the CDCs in development positions.

Senator MIKULSKI. Have you been asked to serve on the Cuomo task force?

Ms. LAZAR. No, I have not.

Senator MIKULSKI. Well, I am going to recommend that, only because I think we are looking at two issues here. One, the actual lending and how the poor are gouged and faulty appraisals and mortgage bounty hunters, all of that. And then there is the FHA disposal or the so-called HUD houses.

And we think your expertise, both in what you have seen in terms of lending or whatever, would be useful, but how we ultimately could get to the core problems, one of which is even the kind of consumer education that needs to go on through community groups that then—that helps avoid people heading to the scams in the first place.

Mr. Chairman, I am out of time. But one of the reasons you had predatory lending was they had—it was not the banks. The banks in Baltimore are not overseeing a lot of this. In fact, many of them have instituted controls and are helping solve the problem. But there are these institutions that look like banks, spend like banks, lend like banks, but are not regulated like banks.

Now I am not in a position to propose a new regulatory framework, but you filled the gap where banks could not go or whatever. But you bring a lot of "banking experience," both in the area of consumer protection and education, as well as working with institutions and local communities that could deal with it. Because FHA disposal is not only due to predatories, but it is due to a lot of other things connected to buying home ownership.

A melancholy figure was, of the 10,000 houses that were sold in Baltimore last year, 4,000 are now in default. And of those 4,000, it is not all predatory lending. So something got pretty screwed up somewhere. And it has been terrible for the poor and terrible for the community where those houses have been vacant.

Ms. LAZAR. Well, we would certainly be very happy to participate in any way you would suggest.

Senator MIKULSKI. Thank you.

Mr. JONES. Could I just add, I think your conclusion that trying to dump, if you will, these properties on the non-profit institutions is not a wise thing for them. One, they are financially strapped. But two, this is not their—CDFI's at least—this is not their core competency. Where they can play a role is educating consumers and providing finance where banks are not providing it. That is their competency, and that is what they do as well as anybody.

Senator MIKULSKI. Well, thank you.

I know that our time is up. We are going to suggest your membership. The second thing is that whatever you have—what I am looking for are some of the—how you work—after someone gets the money, how do you stay in touch with them to see what they are doing to accomplish the results of what we bankrolled in the first place. So thank you.

SUBCOMMITTEE RECESS

Senator BOND. Thank you very much, Senator Mikulski.

And my thanks to you, Ms. Lazar and Mr. Jones.

The hearing is recessed. We will keep the record open for further comments or questions for the record.

[Whereupon, at 11:35 a.m., Wednesday, April 12, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENTS OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT AND INDEPENDENT AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

THURSDAY, APRIL 13, 2000

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

The subcommittee met at 9:30 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Christopher S. Bond (chairman) presiding.

Present: Senators Shelby, Craig, and Mikulski.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

STATEMENT OF DANIEL S. GOLDIN, ADMINISTRATOR

ACCOMPANIED BY:

LEE B. HOLCOMB, CHIEF INFORMATION OFFICER
ARNOLD G. HOLZ, CHIEF FINANACIAL OFFICER
MALCOLM L. PETERSON, COMPTROLLER
VICKI A. NOVAK, ASSOCIATE ADMINISTRATOR FOR HUMAN RESOURCES AND EDUCATION
JOHN D. SHUMACHER, ASSOCIATE ADMINISTRATOR FOR EXTERNAL RELATIONS
JEFFREY E. SUTTON, ASSOCIATE ADMINISTRATOR FOR MANAGEMENT SYSTEMS AND FACILITIES
EDWARD HEFFERNAN, ASSOCIATE ADMINISTRATOR FOR LEGISLATIVE AFFAIRS
JOSEPH H. ROTHENBERG, ASSOCIATE ADMINISTRATOR FOR SPACE FLIGHT
SAMUEL L. VENNERI, ASSOCIATE ADMINISTRATOR FOR AEROSPACE TECHNOLOGY
EDWARD J. WEILER, ASSOCIATE ADMINISTRATOR FOR SPACE SCIENCE
ARNAULD E. NICOGOSSIAN, ASSOCIATE ADMINISTRATOR FOR LIFE AND MICROGRAVITY SCIENCES AND APPLICATIONS
ROBERTA L. GROSS, INSPECTOR GENERAL
GHASSEM ASRAR, ASSOCIATE ADMINISTRATOR FOR EARTH SCIENCE
LORI A. GARVER, ASSOCIATE ADMINISTRATOR FOR POLICY & PLANS

OPENING STATEMENT OF SENATOR CHRISTOPHER BOND

Senator BOND. Good morning. The hearing of the Senate, VA–HUD, and Independent Agency Subcommittee will come to order.

The Subcommittee meets today to review the 2001 budget request of the National Aeronautics and Space Administration. We welcome Dan Goldin, the NASA Administrator, and his staff.

I also should acknowledge Roberta Gross, the NASA Inspector General, and thank her for her good work on computer security issues. These are very, very important issues, and we thank you for your diligence and attention to these issues at NASA.

I always look forward to the NASA hearing. NASA has the unique position and opportunity to lead us into the 21st century in the exploration of our last frontier, the universe. We are on the cusp of the bicentennial of the Lewis and Clark expedition that was the first step in the exploration of what was to become our Nation. This is a bicentennial in which I have particular interest, since my State was part of the Louisiana Purchase and my great, great grandfather poled the boats up the river for them—he didn't make it in Steven Ambrose's book, but he was out there plugging away.

In some ways, NASA has a similar opportunity to be the Lewis and Clark of the 21st century, through its history of putting men and women in space and on the moon, with the assembly of the International Space Station and ultimately as we reach out to the ends of the universe through both manned and unmanned missions. NASA will help to redefine the measure of our people as the discoverers and explorers of the 21st century.

I congratulate you also on the tenth anniversary of the Hubble Space Telescope. That in itself is a remarkable story of the little telescope that could. And someday soon we will be able to look to the far corners of the universe and ironically see the beginning of time. These are very exciting challenges, and I applaud the efforts of all the people at NASA.

Having said that, we again have a lot of hard work to do as we prepare the VA–HUD Appropriations bill for fiscal year 2001. Despite the rosy optimism of some, we as usual have a number of hard funding decisions to make. We work with the budget people and with the Appropriations Committee to assure that we have the allocations necessary; and we don't have them yet, but that's not new either. So this will be another struggle.

In NASA's case, the Administration is requesting some $14 billion, an increase of $434.5 million over the fiscal year 2000 funding level of $13.6 billion. This is a significant increase at a time in which we have to balance a number of significant other funding priorities, including the need to provide increased funding for VA medical care and increased funding for the renewal of all expiring section 8 rental assistance contracts. Nevertheless, NASA is an important part of the subcommittee, and as always we will work hard to meet the budget needs of all of our agencies and try to be as generous as we can.

NASA's biggest priority remains the International Space Station, and we continue to have concerns regarding the large cost overruns and delays in the assembly schedule, as well as fears that our Russian partners are not going to shoulder their fair share and meet their commitments.

In particular, as of last year, Boeing had cost overruns of almost $1 billion. In addition, the cost of the International Space Station had grown from an estimated $17.4 billion in cost to some $26 bil-

lion currently, and this does not include the cost of operation. Unfortunately, this makes the space station a poster child of bad government budgeting and poor decision-making.

These are big problems, and as you know, the more the ISS is delayed the more the costs will increase, which ultimately means that we are losing money that could go to many other important projects. I hope that you will be able to provide us today, Mr. Administrator, with some confidence and good news about the status of the International Space Station.

I also remain concerned about the need to provide safety upgrades to the space shuttle. I know that shuttle safety is a priority, but I remain disturbed by recent concerns raised in the 1999 annual report of the Aerospace Safety Advisory Panel that warned about risks to the shuttle fleet because of obsolescence and projected increases in flight rates.

I know that NASA is being proactive with regard to these concerns as well as problems identified because of workforce reductions, and I emphasize our continuing support for this vital component of your mission.

I consider the future of space transportation the next big debate at NASA. I think we all agree that the cost of going into space is too expensive to ensure the success of a commercial space industry, and that the next challenge is the development of a reusable launch vehicle that should dramatically lower the cost of accessing space. NASA had expected to make a decision on a reusable launch vehicle as a replacement to the space shuttle by this time. While NASA continues to work with industry on a reusable launch vehicle such as the Venture Star, we have a long way to go.

NASA currently is proposing a new Integrated Space Transportation program. Under this program, NASA intends to commit some $4.4 billion between now and 2005 to develop a technology base for the replacement of the space shuttle. The program is designed to attract the investment of the private sector in the development of new space transportation options, with the private sector taking the lead in development and funding after 2005.

NASA plans to use this program to solicit new ideas and build on the X–33 program, the X–34, and the Venture Star as a technology base for the development of new technologies and vehicles. Nevertheless, it's not clear whether there is adequate private interest to support the amount of private financial commitment that will be necessary to finance successfully and complete a shuttle replacement.

Finally, I am concerned about the loss of two consecutive Mars missions in the Mars Surveyor program, and what this means to NASA's philosophy of "faster, better, cheaper". These losses could have been avoided. In particular, the $125 million Mars Climate Orbiter was lost on September 23, 1999 because of a failure by Lockheed Martin/JPL to convert English units into metric units. I think you would fail high school freshman math if you made that mistake.

More recently, the $165 million Mars Polar Lander likely was lost because of a coding failure that never should have occurred. Both programs had histories of cost overruns and schedule delays.

These failures follow last year's losses of the Lewis and the Widefield Infrared Explorer or WIRE missions.

Since 1992, NASA has launched 16 robotic space exploration missions under the "faster, better, cheaper" policy, and seven of these missions have either failed or had serious problems post-launch.

While the Mars Program Independent Assessment Team Report, released on March 14, 2000, acknowledged the value of the Mars program as well as the viability of the "faster, better, cheaper" philosophy, I want to be sure that the right lessons are learned and applied. In particular, I believe the report emphasized the need to establish protocols that minimize risk, including the need to provide experienced leadership, standards for risk assessment, and the development of realistic budgets and reserves for each mission, which also tie decision-making to appropriate headquarter oversight. In other words, the reasonable test must be made to ensure that the suckers work. And when we don't do that, we have some very expensive and very embarrassing losses for all of us.

The bottom line is that NASA missions and activities have inherent risk, that pushing the envelope of human knowledge requires some risk and must allow for failure. Nevertheless, any failure must be smart failure, not stupid failure. And by that I mean we need to take every reasonable step that is foreseeable to ensure success. If something totally unknown happens, that's understandable. But let's at least take all the reasonable steps we can to avoid it.

I look forward to hearing your views on this issue. I now turn to Senator Mikulski for her opening statement and comments.

OPENING STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. Thank you very much, Mr. Chairman, and many of the flashing yellow lights that you raised about the budget are also very much in my own thinking, particularly the conflict that we will have within our own VA–HUD appropriations about meeting our responsibilities.

Dr. Goldin, I am going to welcome you today for your eighth appearance before this subcommittee, and I want to thank you for your many years of service. I know that when you took the job of being the NASA administrator at the request of President George H. Bush, that you made many sacrifices, both financial and others, to assume this responsibility.

And now you've served two presidents; President Bush and President Clinton, and in my mind, this is the way the administrator of a science program should be. Science is not about a party platform, science is not about ideology, science is about discovery and our product is knowledge.

This is again, what it says to me is that as we work together, that hopefully that we view our science programs that way. We have certainly tried to do this in our appropriations committee. I can't ever say enough about what it meant for me to come and work with Senator Garn, who was a great teacher to me in space, and now this excellent relationship that I share with this chairman as we look at science. We share the same populist views and somewhat the same pugnacious style.

Senator BOND. I'm flattered, Senator.

Senator MIKULSKI. So pugnacious and populist, that's kind of a—heppy would be another one that I would add.

But your dedication and leadership has helped make NASA ready to meet many of the new challenges for the new century, and like anything related to discovery, we've had some big hits and we've had some big misses. And I know we'll talk about those, but I could not let this hearing come to an end without thanking you for what you've done and the team that supports you, and I also want to acknowledge the role that your family has played, because they had to be very supportive of the sacrifices that you made, leaving the private sector to come here.

You and I just celebrated the tenth anniversary of the Hubble Space Telescope. It was a great day for NASA and Goddard and affirmed the wider role that science does play in our lives. I was very proud of the men and women at Goddard, the astronauts, technicians, engineers and the staff at the Space Telescope Institute, which also is very proud of the team that supports that.

NASA though is not only a science agency, it's also a technology agency. Thanks to NASA, we are not only exploring the far reaches of our universe, we are pushing the envelope of technology. There are many aspects we could talk about, but one I know that I'm particularly happy about is that through the Hubble Space Telescope there have been new techniques developed in X-ray technology; and because of that we will be able to do better MRIs, we will be able to do better mammographies; so while we explore the outer space, we are also using the technology of NASA to explore the inner space, and this I think is what helps the American people be so supportive of what we do.

The support also has to come financially. The administration, I know, has proposed a $400 million increase in NASA's budget for 2001. This is one of the largest increases in NASA's history, but considering that it's been flatlined for some time, the rise is really in keeping with where we should have been all along.

I really do hope we get a 302B allocation that enables us to sustain the president's request, and I know we'll be working very vigorously to do this. Why? There is a lot to be done at NASA. Much is needed in this budget for the safety upgrades in the space shuttle. I am committed to do whatever is necessary to ensure the safety of our shuttle astronauts, and I support the funding increases for the new hardware and additional staffing to be able to do that.

We must make every effort to reduce human error in the shuttle program so that we not only can launch on time, but it's that: send someone to space and return them safely with what we asked them to do.

While the shuttle remains the workhorse of our launch capacity, we do need reliable launch systems that dramatically reduce the cost of getting to space. One of the biggest barriers to expanding telecommunications capabilities is the cost of launching satellites. If we can reduce the cost of launch, we can further expand our telecommunications market. I do believe that NASA's new Space Launch Initiative is one of the best ways to determine the most feasible system for the next generation of the reusable launch systems, and I think we're all tremendously interested in this.

Over the next 5 years, I know that NASA will assess the viability and feasibility of new launch systems that will cost less than the space shuttle, and I think this is very important. I know that there will be a 5-year competition among contractors to see what's the best vehicle and the best alternative to the shuttle. Cheaper, more reliable launch systems are the key to unlocking the commercial activity.

While we look ahead at the safety of the astronauts, we also have to look at some of the issues that I know that we are confronting. I share the concerns that Senator Bond has raised about the Mars losses; those were three big losses. They were a loss of science, they were a loss of time, they were a loss of money and in some ways a loss of confidence in really this whole Mars approach.

We look forward to hearing from you about what you really think is the analysis of the "faster, quicker, cheaper" and what worked and what perhaps are the lessons learned from it. I know that NASA's budget also includes an increase for space science. One of the new programs is "Living With A Star" initiative; I am going to commend you and Dr. Ed Weiler, the Administrator for Space Science, for this program and look forward to hearing more about it.

As I understand it, "Living With A Star" will be a series of missions to better understand how the sun interacts with the earth; and this is not only a great intellectual and scientific exercise, but could be very crucial in providing longer advanced warning of solar storms to protect power grids and telecommunications.

Two other things: One is, I look forward to discussing with you nanotechnology, this new breakthrough in technology development that could take the United States of America so far into the future with new breakthroughs, and I look forward to being with you today when you do an agreement with the Cancer Institute on this exploration of outer space and inner space.

Earth science, unfortunately the 5 year budget outlook shows a cut in funding of $100 million by the year 2005. This is the only science program that shows a cut in funding, and it has raised my concerns about NASA's long term plan for space science. I do believe that NASA needs a post-EOSDIS vision for earth science, and would like to discuss that with you.

I am also concerned, once again, about Russian participation in the International Space Station. There are consistent reports that the Russians now have diverted money from the station, and it's gotten into the hands of their biological warfare program. I am deeply troubled by the fact that the Russians continually do not deliver, we have to continually do the backup, they did go to Iran with their rocket technology, and I sure hope you can tell me that they haven't taken some of our space money and put it into biological warfare.

So with that, I am going to conclude my remarks and move on.

[The information follows:]

VERIFICATION OF PAYMENTS TO BIOPREPARAT

INTRODUCTION

On January 27, 2000, the NASA Associate Administrator for Space Flight directed that a NASA team be formed to review the funding process for biotechnology re-

search under the Russian Space Agency (RSA)[1] contract (NAS15–10110) to determine whether NASA funds were used for their intended purpose. NASA directed the review because a January 25, 2000, New York Times article reported an allegation by certain Russian scientists that some of the $1.65 million that NASA provided to fund biotechnology research may have been inappropriately redirected by Biopreparat, a major Russian pharmaceutical firm, to fund biological warfare research. The NASA team included financial, procurement, and technical officials from the Lyndon B. Johnson Space Center (JSC) and an auditor from the NASA Office of the Inspector General. (A list of the participants is at the end of this report.) The team performed the verification at JSC in late January and early February 2000 and at Rosaviakosmos during February 7–11, 2000. Appendix A provides details on scope and methodology.

BACKGROUND

The RSA contract is a firm-fixed-price contract, originally priced at $400 million, initiated in December 1993 via letter contract, and definitized in June 1994. As of February 2000, the contract value was about $537 million, of which $529 million has been obligated and $523 million has been spent. The RSA contract includes two phases. Phase I involved Shuttle missions to the Russian *Mir* space station. Phase II involves Russian services and supplies for the International Space Station (ISS).

The RSA contract specifies a variety of deliverable items and services to be provided to NASA by RSA (Appendix B describes the acceptance and payment process for deliverable items). These include not only U.S. crew missions and Shuttle docking at *Mir*, but also crew training; integration, accommodation, and operation of U.S. research hardware on *Mir*; cosmonaut time for the operation of experiments; and technical data regarding the characteristics of *Mir*. The research program to be conducted on *Mir* was coordinated between the NASA and RSA by a joint Mission Science Working Group. In addition to the flight research program on *Mir*, the contract required a separate program of predominately ground-based research to be conducted by Russian investigators.

The contract earmarked funding of $20 million for the solicitation, selection, administration, and execution of a research program to be carried out under the RSA Scientific and Technical Advisory Council (STAC). The contract also identified specific deliverable items, which RSA was to complete between August 1994 and August 1997 (Appendix C shows the list of deliverable items). A total of $18.2 million was available for distribution to investigators (scientists), with the remainder of $1.8 million allocated for administrative and reporting expenses, including the solicitation, review, and selection of project proposals. The contract provided that RSA, through STAC, would use the proposals to develop an integrated research plan containing scientific investigations to be performed, milestones, goals, objectives, and cost. The Deputy Associate Administrator, Office of Life and Microgravity Sciences and Applications, was responsible for reviewing the research plan for NASA.

STAC was organized into ten discipline sections (Appendix D shows the ten discipline sections); each section was chaired by an acknowledged leader in the field who was the director (or, in some cases, a senior official) of a research institute or design bureau. Each section had multiple investigations, representing a variety of research institutions. One of the sections was Biotechnology, which was led by Biopreparat and which had funding requirements of about $1.65 million.

RESULTS OF VERIFICATION

Between February 1995 and January 1998, NASA paid RSA $20 million for space-related scientific research under terms of the RSA contract. Of the $20 million, RSA paid Biopreparat $1.529 million[2] for space biotechnology scientific research.[3] Of the $1.529 million, Biopreparat distributed $1.368 million (89.5 percent) to its eight subcontractors and retained $0.161 million (10.5 percent). (Appendix E shows the distribution of the $1.529 million.) The activities associated with the $0.161 million were carried out directly by Biopreparat under terms of an RSA contract with Biopreparat. The contract price structure showed how Biopreparat planned to use the funds that they retained. Also, RSA submitted periodic reports to NASA as contract deliverable items, which NASA accepted as satisfactory completion of the

[1] Now known as the Russian Aviation and Space Agency (Rosaviakosmos).

[2] The $1.529 million was actually paid in rubles (about 7.904 billion) at an average pre-1998 conversion rate of about 5,170 rubles to a dollar.

[3] RSA also paid about $0.121 million to the Shemyaking Ovchinnikov Institute of Bioorganic Chemistry, which constitutes the balance of the $1.65 million that NASA paid for biotechnology research.

planned research. Within the scope of our verification, we saw no indication that the funds were used for other than the intended purpose.[4] We concluded, based on the evidence collected, that there was no need to expand the scope of the verification.

APPENDIX A.—SCOPE AND METHODOLOGY

We selected our sample of payments and performed initial verification steps at JSC. We then met with Rosaviakosmos representatives in Moscow to discuss their financial process and perform further verification steps.

STEPS PERFORMED AT THE JOHNSON SPACE CENTER

Before we visited Rosaviakosmos, the JSC Financial Management Division identified all payments made for implementation of scientific and research activities under the scientific program of contract NAS15–10110 between NASA and RSA, carried out by Biopreparat under subcontract with RSA. The Financial Management Division identified 18 contract milestone payments to RSA totaling $20 million, with which RSA paid Biopreparat $1.529 million for 6 subcontract milestones (Appendix C shows the contract milestones). We reviewed contract payment records from November 1994 through January 1997 and subcontract payment records from September 1995 to February 1998. To verify payment amounts and dates, we compared the amounts and dates of the six invoices to JSC payment records.[5]

STEPS PERFORMED AT THE RUSSIAN SPACE AGENCY

At Rosaviakosmos, we compared our data to RSA financial records to verify NASA payments to RSA and the funding flow to Biopreparat. Through discussions with Rosaviakosmos representatives, we gained an understanding of the financial processes and procedures used by RSA to disburse funds to the subcontractors for biotechnology research. Rosaviakosmos assembled all associated financial records, contract files, and the bank payment orders associated with the six milestones. In addition, Rosaviakosmos and Biopreparat presented copies of subcontractor payment orders that supported the transfer of funds from Biopreparat to its subcontractors.

We reviewed RSA documentation supporting applicable milestones, associated payment orders, and bank transfer notices. To determine how Biopreparat planned to distribute and use the funding provided by NASA, we reviewed the RSA/Biopreparat price structure and related subcontract documents. We examined ten funding transfers from RSA to Biopreparat, which represented the $1.529 million paid by NASA. We also examined and summarized 140 funding transfers from Biopreparat to its eight subcontractors, which represented $1.368 million paid by NASA, and thereby calculated the $0.161 million retained by Biopreparat (Appendix E shows the calculation).

APPENDIX B.—ACCEPTANCE AND PAYMENT PROCESS FOR DELIVERABLE ITEMS

The RSA contract includes a schedule of deliverable items showing the amounts NASA will pay RSA for providing specific goods and services. NASA acknowledges receipt of a deliverable item when the NASA contracting officer's technical representative determines that the item conforms to contract requirements and notifies the NASA contracting officer at JSC. The contracting officer prepares and sends an acceptance document to RSA, which in turn prepares and sends an invoice back to the contracting officer. The invoice specifies where NASA should make payment, usually to the RSA account at the Bank of New York.[6]

When NASA receives an invoice from RSA, the contracting officer matches it to the acceptance document, approves the invoice for payment, and sends the invoice to the certifying officer at JSC. The certifying officer certifies the payment of funds (in dollars) to RSA by the Department of the Treasury. The payment usually covers

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[4] A verification of the funding process can determine the sources, recipients, and amount of funds paid. However, only through additional steps, such as gaining an understanding of the entity, observing its operations, and obtaining independent third party information, might a positive assurance be given on how the funds were actually used. Contractual access is limited to examination of financial information of RSA and its first-tier subcontractors.

[5] The payment records were the EFT Tape Transmission Report (R81P6C20) and the Cash Management Detail Schedule Listing (R81P6C04), which were generated by the JSC Cash Management System.

[6] Invoices for reimbursable travel expenses and for support of RSA offices in Houston and Washington DC specify the RSA account at the F&M Bank of Northern Virginia. These funds stay in the United States. The payment process described in this report refers only to the Bank of New York since those funds are routed to Russia.

several invoices. The certifying officer electronically transmits a payment schedule to the Austin Regional Finance Center, which routes the funds through the Federal Reserve System to the RSA account at the Bank of New York. The Bank of New York receives the funds from the Treasury, electronically transfers the funds to the RSA account at the Bank of Foreign Trade, Moscow (Vneshtorgbank), and notifies RSA of the transactions. Vneshtorgbank receives the transfer from the Bank of New York and then notifies RSA of the transaction.

RSA directs Vneshtorgbank to convert dollars into rubles in the amount needed to pay its subcontractors and to comply with conversion requirements of the Central Bank of the Russian Federation (the Central Bank).[7] Since 1999, the Central Bank has required Russian entities to convert at least 75 percent of foreign currency (dollars) into rubles within 14 days.[8] If an entity does not direct the Central Bank to convert the dollars within the 14 days, the Central Bank executes the mandatory conversion on the 15th day. RSA timing of the remaining conversion depends on the requirements to pay its subcontractors and the expectation of the exchange rate fluctuation. After conversion, RSA transfers the rubles to RSA accounts at various Russian banks, primarily the *Mir* Bank in Moscow.

RSA pays its subcontractors in rubles. The amount RSA must pay its subcontractors is initially established in both dollars and rubles in agreements between RSA and its subcontractors. However, because of volatile fluctuations in the dollar/ruble exchange rate, soon after RSA converts dollars to rubles for a milestone payment, RSA and its subcontractors amend their agreements to reflect the current amount of rubles payable.[9] Upon receipt of a valid invoice from a subcontractor, RSA makes payment by transferring the rubles to a subcontractor bank account.

APPENDIX C.—DELIVERABLE ITEMS FOR SCIENCE RESEARCH

Line Item No.	Description	Completion date	Funding, $M
0003C3a	Solicited Requests for Proposal Report	8/1/94	0.2
0003C3b	Integrated Plan for Science Research (initial)	11/1/94	0.2
0003C3c	Implementation of Integrated Plan for Science Research (installment 1 of 6)	11/1/94	3.2
0003C3d	Administrative Expenses	11/1/94	0.2
0003C3e	Integrated Plan for Science Research (final)	2/1/95	0.1
0003C3f	Interim Research Report	8/1/95	0.1
0003C4	Implementation of Integrated Plan for Science Research (installment 2 of 6)	8/1/95	3.0
0003C5	Administrative Expenses	8/1/95	0.2
0003C6	Interim Research Report	2/1/96	0.1
0003C7	Implementation of Integrated Plan for Science Research (installment 3 of 6)	2/1/96	3.0
0003C8	Administrative Expenses	2/1/96	0.2
0003C9	Interim Research Report	8/1/96	0.1
0003C10	Implementation of Integrated Plan Science Research (installment 5 of 6)	8/1/96	3.0
0003C11	Interim Research Report	2/1/97	0.1
0003C12	Implementation of Integrated Plan for Science Research (installment 5 of 6)	2/1/97	3.0
0003C13	Administrative Expenses	2/1/97	0.2
0003C14	Interim Research Report	8/1/97	0.1
0003C15	Implementation of Integrated Plan for Science Research (installment 6 of 6)	8/1/97	3.0
	Total	.....	20.0

Note: Shaded areas denote the six line items (milestones) that included payments for research done by Biopreparat.

[7] Before August 1998, Vneshtorgbank charged its customers a currency exchange commission of not more than about one-half percent per transaction.

[8] Before 1999, the mandatory conversion amount was 50 percent.

[9] When Vneshtorgbank charged a currency exchange commission or fee, RSA decreased its payments to subcontractors by the amount it paid Vneshtorgbank.

APPENDIX D.—SECTIONS OF THE SCIENTIFIC AND TECHNICAL ADVISORY COUNCIL

Discipline/Lead Organization	No. Investigations	No. Institutions	Funding, $K
Space Technology and Materials Science; Institute of Crystallography, Russian Academy of Science	17	16	2450.0
Geophysical Studies; Institute of Earth Magnetism and Radiowaves, RAS	6	4	1019.32
Space Biomedicine; State Scientific Center-Institute of Biomedical Problems	71	17	6230.0
Earth Natural Resources and Environment Monitoring; Institute of Radioengineering and Electronics, RAS	21	11	3086.786
Investigations of Planets and Small Bodies; Space Research Institute, RAS	10	3	1203.55
Space Biotechnology;[1] RAO ''Biopreparat''	13	7	1649.465
Technical Studies and Experiments; Rocket-Space Corporation ''Energia''	8	7	708.86
Space Astronomy; Institute of Astronomy, RAS	5	5	370.65
Program Integrated Analysis & Formation Effectiveness Analysis, Consortium ''Space Regatta''	6	2	806.45
Problems of Space Power and Propulsion; Keldysh Research Center, RAS	4	2	674.95
Total	.....	.....	18,200.031

[1] Space Biotechnology: Diverse set of investigations similar to U.S. biotechnology interests, including protein crystal growth, effect of microgravity on genetic and cellular processes, antibodies, and polymers; electrophoresis, etc.

APPENDIX E.—DISTRIBUTION OF PAYMENTS TO BIOPREPARAT [10]

	Amount/Percent	Amount/Percent
Total Amount Paid by RSA to Biopreparat	.....	$1,528,865 (100.0)
Less: Amounts Distributed by Biopreparat:		
Joint Stock Company, ''Komposit''	$97,686 (6.4)	.....
State Research Institute of Applied Microbiology	287,373 (18.8)	.....
Scientific Technical Center, Ecology and Space	95,010 (6.2)	.....
State Research Institute of Highly Pure Biopreparations	94,784 (6.2)	.....
Joint Stock Company, ''Biochimmash''	91,671 (6.0)	.....
Saint Petersburg Vaccine and Serum Research Institute	90,567 (5.9)	.....
Joint Stock Company, The Institute of Engineering Immunology	228,658 (15.0)	.....
State Research Center of Virology and Biotechnology (''Vector'')	381,961 (25.0)	1,367,710 (89.5)
Amount Retained by Biopreparat	.....	161,155 (10.5)

[10] Although payments are shown in dollars, the payments were actually made in rubles at an average pre-1998 conversion rate of about 5,170 rubles to a dollar.

TEAM MEMBERS

John H. Beall, Chief Financial Officer, Johnson Space Center; Dennis E. Coldren, Program Director, Human Exploration and Development of Space Audits, NASA Office of the Inspector General; Thomas E. Cremins, Deputy to the Assistant to the Director for Human Space Flight, Russia; and K. Lee Pagel, Administrative Contracting Officer.

PROTOCOL

ON NAS15–10110 BIOPREPARAT FUNDING INFORMATION EXCHANGE MOSCOW, FEBRUARY 7–FEBRUARY 11, 2000

General Purpose:

To verify and confirm the correctness of the financial relationship and obtain an understanding of Rosaviakosmos' (previously RSA) financial activities and business process associated with Russian firm Biopreparat under contract NAS15–10110. Also, to verify NASA funding transferred through Rosaviakosmos to Biopreparat and the resulting flow-through of funding to subcontractors.

Specifically:

1. Review Rosaviakosmos' internal documents supporting the transfer of payments to Biopreparat.
2. Review the support for the individual cost elements contained in the Rosaviakosmos contract with Biopreparat.
3. Verify the receipt of NASA funds by Biopreparat and subsequent transfer of those funds to subcontractors (research institutes).

Participants:

Tom Cremins—NASA; Anatoly Ermolaev—Rosaviakosmos; John Beall—NASA; Roman Yakimenko—Rosaviakosmos; Lee Pagel—NASA; Alla Nazarova—Rosaviakosmos; Dennis Coldren—NASA/OIG; Larisa Lazutina—Biopreparat; and Anna Andreeva—TTI (interpreter).

Methodology:

Prior to arrival at Rosaviakosmos headquarters, the NASA team identified all payments made for implementation of scientific and research activities under the scientific program of contract NAS15–10110, between NASA and Rosaviakosmos, carried out by Biopreparat under subcontract with Rosaviakosmos. Six contract milestone payments paid to Biopreparat were identified for review. Verification covered records for the period from November 1994 through January 1997. The scope of financing in accordance with the terms of contract totaled $1.529 million.

Rosaviakosmos assembled all associated financial records, contract files, and the bank payment orders associated with the six milestones. In addition, Rosaviakosmos (with the assistance of Biopreparat) presented copies of subcontractor payment orders that supported the transfer of funds from Biopreparat to its subcontractors.

The team verified the flow of NASA funds from Rosaviakosmos to Biopreparat. From Biopreparat documentation, the team verified 140 funding transfers to subcontractors for the six milestones.

To identify how Biopreparat planned to distribute and use the funding provided by NASA, appropriate contract documents were reviewed as well as price computation on the basis of the Rosaviakosmos/Biopreparat price structure.

Conclusion:

NASA funds of $1.529 million, which were paid under the Rosaviakosmos/NASA contract, were received by Biopreparat. Biopreparat distributed $1.368 million between its subcontractors and retained $0.161 million. The activities associated with the $0.161 million, which were carried out directly by Biopreparat, amounted to 10.5 percent of the amount under the Rosaviakosmos/Biopreparat contract for space biotechnology scientific research.

The contract price structure showed how Biopreparat planned to use the funds that they retained. The NASA team saw no indication that the funds were used for other than the intended purpose.

Of special note, Rosaviakosmos and Biopreparat representatives were extremely cooperative and cordial in providing explanations of Rosaviakosmos financial process and supporting documentation for the transactions reviewed. Representatives of Rosaviakosmos and Biopreparat expeditiously submitted all the necessary supporting documentation.

Done in Moscow on February 11, 2000, in English and in Russian with wordings in both languages in the equal force.

Senator BOND. Thank you, Senator Mikulski.

Senator Craig, do you have an opening statement?

Senator CRAIG. I do not. I'm here to listen. Thank you, Mr. Chairman.

Senator BOND. All right. Thank you very much, and Mr. Goldin, we will now have your presentation followed by your multimedia show.

STATEMENT OF DANIEL GOLDIN

Mr. GOLDIN. First, Mr. Chairman, I submitted formal testimony. I'd like it to be put in the record.

Senator BOND. I should make the statement that we will accept your full statement as submitted. We will also hold the record open so that members of the committee may offer additional questions, and I have far more than I can ask in a hearing of any reasonable length, and other members may have, and we invite you to add, in addition to your responses to the questions submitted to you, any further comments that you think would be helpful.

Please proceed.

FISCAL YEAR 2001 BUDGET REQUEST

Mr. GOLDIN. Thank you, Mr. Chairman.

The President's fiscal year 2001 request of $14,035 million is an increase of 3.2 percent over last year's appropriation, and reflects future year increases that exceed slightly the rate of inflation.

It includes an $1.5 billion increase over 6 years to address Space Shuttle safety improvements through hardware and software upgrades and other efforts. This investment should improve the Space Shuttle safety by about a factor of two.

Thanks to support from this committee, the two highest priority upgrades have already been initiated, and we are studying a broad range of other upgrades for implementation by 2005.

Funding is included for additional personnel for NASA's Human Space Flight Centers. We told the committee that if we found we had cut too far, we would come back and tell you. After internal and external reviews, we have concluded that we had cut too far. This funding will stabilize and revitalize our workforce to ensure that the right skills and staffing are in place to operate the Space Shuttle safely, and to assemble the space station.

This year will be a landmark year for the International Space Station. We are confident that the first crew will begin to live on board the station. Because of the Russian Proton rocket failures, launch of the Russian Service Module has been delayed until July.

I am particularly enthused that the budget includes funding for Living With A Star, a new scientific research initiative to understand the sun's impact on earth and the space environment around it.

It also reflects robust funding for initiation of a critical new Space Launch Initiative with investment of $4.5 billion over 5 years.

The budget includes a broad range of new initiatives in science and technology, including additional funding for the Mars program, in anticipation of the findings of the various reviews just completed, and investments in biotechnology, nanotechnology, and information technology that Senator Mikulski referred to.

NASA SETBACKS

Mr. Chairman, I should note that during the past year NASA experienced some severe disappointments and problems, particularly the back-to-back losses of the Mars Climate Orbiter and the Mars Polar Lander and the Deep Space 2 probes.

NASA deliberately commissioned a number of independent reviews to examine the problem, search for root causes, and recommend changes. In the past month, NASA has issued and submitted to the committee several reports, including those of the Mars Climate Orbiter Mishap Investigation Board, the "faster, better, cheaper" review, and the Mars Program Independent Assessment Team led by Tom Young.

YOUNG REPORT

I would like to take a moment to address the Young report in particular. When I was sworn in as NASA Administrator in 1992, I set out on a new agenda. NASA had outstanding people and incredible support from the American people, but NASA had a problem, it was clinging very tightly to the past. NASA's robotic missions were taking too long, taking too little risk, and costing too much money.

Instead, I proposed empowering the NASA workforce, asking them to tell us how we can implement our missions in a more cost-effective manner. How can we do everything better, faster, cheaper without compromising safety?

Knowing that change is difficult, even when there is little or no choice, I pledged to the workforce that we would not be overly prescriptive, we would not micromanage, and we would encourage them to take risks, do things differently, even deviate from past practice, so long as it followed sound principles.

But I reminded them that, in pressing the boundaries they would encounter failure. In replacing billion-dollar robotic missions with multiple smaller robotic missions and flying them more frequently, they could expect two or three failures in every 10 attempts. But 10 successes out of 10 attempts would mean that they would not be adequately pushing the boundaries. And more than two or three failures out of 10 attempts would be too many.

NASA'S SUCCESSES

Since that time, the revolution has taken hold and NASA has had spectacular successes. Here's our report card: Since 1992, NASA has launched 146 payloads valued at a total of $18 billion. Of this number, 136 payloads were successful. Our total losses amounted to 10 payloads at about a half billion dollars, or less than 3 percent. Planetary spacecraft, once launched twice a decade at a cost measured in billions, are now routinely launched each year at a small fraction of that cost. This is worldclass performance by any reasonable standard.

We wanted to demonstrate to the world that NASA could do things much better, and NASA delivered; with Mars Pathfinder, with Mars Global Surveyor, with Deep Space 1. We pushed the boundaries as never before and had not yet reached our limit.

MARS 98

Not until Mars 98. We are examining the Mars 98 failures in microscopic detail, and I might just say, we are probably punishing ourselves more than anyone from the outside could do it, because we're such, so focused on success.

We established Red Teams to evaluate the launch readiness of all our missions for this year, and since we launched the Mars 98 missions, we have had 12 spectacular successes: XMM, FUSE, QuikSCAT, ACRIMSat, Stardust, Landsat-7, Terra, ISS Servicing mission, Chandra, the Hubble servicing mission, the Shuttle Radar Topography Mission, and IMAGE. Those are $4.6 billion worth of space missions launched successfully.

We have concluded that, in spite of our overall success rate and the fact that we are still roughly within the bounds I set, the warning bells of a trend are sounding. So we will take a pause, but we will not go back.

YOUNG REPORT

I agree with the conclusions of the Young report. In fact, I told the leaders of the Mars 98 team that in my effort to empower people I, Dan Goldin, pushed too hard, and in doing so stretched the system too thin. As NASA Administrator, I accept responsibility. Mistakes were made that could have been avoided and must be corrected.

The Young report reminds us how important it is to have adequate margins in planning and executing programs, but that is not a license to turn on the funding spigot. There are many things that we can do that do not involve money.

We know that we have three main areas to work on: communication, training and mentoring, oversight and review. We will implement improvement in these areas by focusing upon people, processes, execution, and advanced tools and technology. I want to remind this committee how strongly I believe that we should not throw money at these challenges. Where it is appropriate, we will add funding, but at this point in time, I am not asking this committee for any more than our present presidential request.

ADDRESSING THE YOUNG REPORT

We are already taking steps to address the Young report. We have streamlined management of the Mars Surveyor program at NASA Headquarters and JPL, and we just announced two outstanding Americans to take charge and have better communications. We are redefining the entire Mars program architecture, and we will be able to discuss it with you later this year.

NASA's Chief Engineer, Brian Keegan, is putting together a matrix that will incorporate NASA's responses to all recommendations concerning program management to ensure consistency of best practices and update our processes to take into account what we have learned.

As has been the case at various times throughout this Agency's 40-year history, we are committed to learn everything we can from these losses, alter our approach where prudent, and move on.

HUBBLE SPACE TELESCOPE

Senator Mikulski, as you mentioned, we just celebrated 10 years of the Hubble Space Telescope operation. The Hubble started out on orbit as a failure, but NASA overcame that failure, drawing upon the expertise of the entire agency and the wonderful people at NASA Goddard. And the world has been rewarded with 10 years of spectacular discovery.

As was the case with Hubble and a broad range of other programs, NASA has undertaken a journey towards revolutionary change with unbelievable support from this committee. And we are resolved to continue to merit that support.

PREPARED STATEMENT

Mr. Chairman, I am compelled one more time to tell you how crucial it is for NASA's 2001 request to be fully funded. It is an affirmation of what the NASA workforce has been striving for over the last several years. I committed to the dedicated and courageous employees across the country that I would press NASA's case with you today and make this plea. Given the sacrifices this workforce has made in streamlining NASA's budget since 1993—and you can see the chart there—I hope you will do all you can to make this very good budget request a reality.

Mr. Chairman, I am prepared to respond to your questions.

[The statement follows:]

PREPARED STATEMENT OF DANIEL S. GOLDIN

Mr. Chairman and Members of the Subcommittee: I am pleased to be here to present to you NASA's budget request for fiscal year 2001. This is a great budget. It fully funds NASA's priorities in fiscal year 2001: make investments in improving Space Shuttle safety; build the International Space Station (ISS); reduce the cost of access to space through a new Space Launch Initiative; invest in outstanding science and technology; and, revitalize the NASA workforce and facilities.

The fiscal year 2001 request of $14.035 billion represents an increase of 3.2 percent over the fiscal year 2000 enacted level, and reflects future year increases that exceed the rate of inflation. If the Administration's vision for NASA is enacted by Congress, funding for NASA will increase from an fiscal year 2000 appropriation of $13.6 billion to $15.6 billion in fiscal year 2005. That is an endorsement of our Strategic Plan of a balanced space and aeronautics program and a tremendous tribute to the NASA team. The percentage of our fiscal year 2001 budget devoted to science and technology has increased from 31 percent in fiscal year 1991 to 42 percent, and is planned to grow to 51 percent by fiscal year 2005. It represents a strong commitment by this Administration to invest in science and technology, which is the Nation's foundation for future discoveries and economic prosperity.

Before I discuss NASA's exciting future and the new programs provided for in this budget, I would like to share with the Committee NASA's achievements, as well as our disappointments, since the last time I appeared before you. It is this history on which the fiscal year 2001 budget is built, which prepares us for the future, and which provides the lessons and character to accomplish what was previously only imaginable.

We had a very exciting year in fiscal year 1999, full of exciting missions and discoveries as we transitioned into the New Millennium. The achievements in fiscal year 1999 extended from improvements in aeronautics applications to benefit the FAA and the air-faring public to the far reaches of the universe, which addressed scientific objectives ranging from the environmental to the cosmological.

The list of accomplishments was impressive:

We started off the year with the launch of Deep Space One, a mission to test 12 revolutionary technologies including spacecraft autonomy and ion propulsion. The Submillimeter Wave Astronomy Satellite (SWAS), a small explorer mission, was launched to study the chemical composition of interstellar gas clouds. We launched Stardust on February 7, 1999, to rendezvous with comet Wild-2 in 2004, and bring

back to Earth a sample of comet dust in 2006. In Earth Science, we launched Landsat-7, the continuation of the successful Landsat program;Terra, our flagship mission to study the Earth as a system; Acrimsat the latest in a series of instruments used to study the sun's energy, and QuikSCAT to tell us how the wind blows over the oceans. FUSE, the Far Ultraviolet Spectroscopic Explorer, was launched on June 24, 1999, to observe the universe in the ultraviolet and try to answer questions such as what conditions existed in the universe a few minutes after the Big Bang.

The first two ISS assembly missions were launched in November and December. In July, the Space Shuttle Columbia, commanded by the first female Shuttle commander, Colonel Eileen Collins, deployed the Chandra X-ray Observatory. The Hubble Space Telescope scientists calculated a value for how fast the universe is expanding, after 8 years of painstaking measurement. Astronomers funded by NASA witnessed for the first time a distant planet passing in front of its star, providing direct and independent confirmation of the existence of extrasolar planets. Mars Global Surveyor provided the first global 3-dimensional map of Mars, and the Compton Gamma Ray Observatory enabled the first ever optical image of one of the most powerful explosions in the universe.

NASA and its industry partners developed new technology to allow planes to land safely in bad weather on parallel runways. The test version of the X–34 rocket plane, made its first captive-carry flight toward certification in preparation for testing new technologies and methods of operation needed to develop low-cost reusable space vehicles. We worked with the launch industry on the Space Transportation Architecture Studies, the fruits of which are reflected in this budget plan. Although safety has always been of foremost concern in NASA, we increased our focus on the need for a safe, healthy, and productive workforce and environment, and strengthened our resolve to reduce program costs as a result of focussing on improving safety. That philosophy is reflected throughout this budget.

At the end of 1999, NASA safely and smoothly transitioned to the Year 2000 with no significant problems. NASA's success was due to the hard work of hundreds of dedicated employees, contractors, and our international partners. During the transition period and the first few business weeks of 2000, we experienced only minor anomalies that were easily addressed. None of the anomalies had any significant impact on critical operations or functions. Computer hacking was at normal levels, and no Y2K-related attacks were detected.

In 1999, we also experienced some severe disappointments and problems: in the Mars Surveyor Program, with the loss of the Mars Climate Orbiter, the Mars Polar Lander and the Deep Space-2 probes, and in the Space Shuttle Program, with wiring problems affecting all of the orbiters, resulting in grounding of the entire fleet from August until December, as well as a hydrogen leak found in one of the Space Shuttle main engines. The TERRIERS and Wide Infrared Explorer missions failed. The X–33 composite hydrogen tank did not pass its qualification tests and the launch plans for the assembly of the ISS were delayed. We experienced deferrals in achieving a launch-ready position for the U.S. laboratory module and other components, although I am pleased to report these have now been overcome and we will be ready to launch. Our Russian partners also made good progress in readying the Service Module for launch, although their funding challenges continue to cause concern about their ability to fully meet their commitments. In addition, Sea Launch just experienced its first launch failure, losing an ICO payload.

1999 also was marked by continuing launch vehicle failures that directly and indirectly impacted NASA programs. The Russian Proton failures have had a significant impact on the readiness to launch the ISS Service Module. The Russians were not alone in experiencing launch failures, as the Japanese, Europeans, and the United States struggled as well to achieve safe and reliable access to space. And, as recently as February 10, a Japanese launch vehicle failed, taking with it NASA's investment in the Astro-E X-ray spectroscopy mission.

There have been a number of independent reviews to examine these problems, search for the root causes, and recommend changes. NASA worked closely with the Department of Defense and others on the Broad Area Review. We chartered reviews of the Shuttle wiring problems, the WIRE and Terriers failures, and of course the Mars Surveyor Program failures. As a result of the Mars failures, I commissioned a Mars Program Independent Assessment Team in December 1999 led by A. Thomas Young. That team was charged to review and assess the entire Mars program architecture, management, content and recent failures. The team had complete authority to delve into any and every aspect of NASA's program management. That report was released on March 28, and has been provided to the Committee. Also, the Mars Climate Orbiter Mishap Investigation Board Report led by the Director of the Marshall Space Flight Center, Arthur Stephenson, and the Faster, Better, Cheaper Review, headed by Tony Spear were released on March 13, 2000.

These reports make several valuable recommendations as a result of assessing both the recent failures and recent successes, and the practices that made them such. We have tasked an Agency-wide NASA Integrated Action Team (NIAT), led by Brian Keegan, NASA's Chief Engineer, to define a plan to mitigate the root causes for these failures and enhance the probability of future success. The NIAT has divided the assessment of all recommendations into four key areas: people, processes, process implementation, and advanced tools and technology. An action set will be formulated for each area.

On September 7, 1999, Joseph H. Rothenberg, Associate Administrator for Space Flight, chartered a Space Shuttle Independent Assessment Team (SIAT). The SIAT performed an independent technical review of Space Shuttle systems and maintenance practices. Dr. Henry McDonald, Director of the Ames Research Center, chaired this joint NASA/DOD/contractor team. The SIAT concluded their activities and submitted a written report to Mr. Rothenberg on March 7, 2000. NASA forwarded copies of the report to Congress on March 9, 2000. The President's fiscal year 2001 budget request has significant increases for investing in Shuttle safety that could be used to address these issues.

Each of these teams has made recommendations that will help us improve our processes and make our operations safer and better. After careful review of these reports, NASA will share our plans to address the recommendations contained in the reports with the Congress and work with you and the Administration to ensure their timely implementation. We must continue to learn, not only from our successes, but also from our failures.

Mr. Chairman, in spite of our difficulties, I believe the report card on NASA's performance reflects well on the support of the Committee and on behalf of the American people. While we accomplished a great deal in 1999, I see an even brighter future ahead. That does not mean we will not experience difficulties. We will. The ambitious programs we undertake are intolerant of human error and stress our human capabilities to detect and respond to anomalies. Our strategy to achieve major improvements in safety, taking advantage of emergent technical tools, such as the Intelligent Synthesis Environment, includes improving our systems management approaches, and continuing to infuse the philosophy and practice of safety in all that we undertake. This budget provides funding for the research into and development of the technologies that will improve the probability of mission success. The additional funding requested for personnel and facilities, Shuttle safety investments, the next generations of launch vehicles, general aviation aircraft, Intelligent Systems, Bioastronautics, and nanotechnologies should all be understood as key players in improving Safety.

FISCAL YEAR 2001 BUDGET OVERVIEW

The fiscal year 2001 budget represents a vote of confidence from the President that NASA is ready to tackle new challenges and opportunities in the New Millennium. This budget funds NASA's priorities and makes critical new investments to improve Space Shuttle safety, continue to build the ISS, enable a new generation of reusable launch vehicles that will improve the safety and reduce the cost of access to space through a new Space Launch Initiative, undertake new science and technology initiatives to enhance our understanding of our planet, the solar system and the universe, and invest in aeronautics, education, our workforce and facilities.

First, the fiscal year 2001 budget includes a $300 million increase through fiscal year 2005 for additional personnel at NASA's Human Space Flight Centers to ensure that the right skills and staffing levels are in place to operate the Space Shuttle safely and to launch and assemble the ISS. Over the past five years, we completed an exercise to streamline and downsize the NASA workforce. We told you that if we cut too far we would come back and tell you. After reviews by both internal and external groups, we concluded that continuing on our current plan would indeed cut too far, in light of the increased activity planned over the next several years as we continue to build the ISS. This budget includes the necessary funding to stabilize and revitalize our workforce, particularly at the Human Space Flight Centers.

Thanks to Administration investments, this budget includes a $1.5 billion increase for Space Shuttle safety improvements over six years. This increase, when combined with $600 million for upgrades in this year's budget, totals $2.1 billion from fiscal year 2000 through fiscal year 2005. This will allow us to address Space Shuttle safety improvements through hardware/software upgrades and personnel, facility, and other safety investments. This $2.1 billion will improve Space Shuttle safety by nearly a factor of two. The safety upgrades will be integrated into the

Shuttle fleet by 2005 to be completed in time to pay benefits, and all safety investments will be managed within the safety allocation budget.

Thanks to support from the Congress, the two highest priority safety upgrades have already been initiated: the electric auxiliary power unit (EAPU), and advanced health monitoring for the Space Shuttle main engines (SSME). We are studying a broad range of additional safety investments, including upgrades, personnel, facilities, and other safety investments. The recommendations of the SIAT Report will provide an important source of input for identifying these additional safety investments. The NASA Advisory Council will undertake a review of our comprehensive safety investment strategy, to ensure that these investments will generate the most effective safety improvements as quickly as possible.

This year will be a landmark year for the ISS. We have high expectations that the first crew will begin to live aboard the Station, as the United States and our partners begin to reap the benefits of long-duration research in space. We anticipate that, as planned research gets underway, opportunities for new unforeseen paths of study will arise. While we have a number of challenges in the ISS program, we are committed to its expeditious completion. Because of Russian Proton rocket failures, the launch of the Service Module (SM) has been delayed, and we are faced with adding a shuttle mission to service the station elements on orbit because those elements are operating longer than planned without the Service Module in place. We are working closely with the Russian Aviation and Space Agency to understand their plans for return to flight of the Proton launch vehicle and scheduled launch of the Russian SM. The Russians have reported that the SM is now scheduled to launch in a window between July 8–14, and the first successful Proton launch since last year's failures occurred on February 12. NASA is proceeding with preparations to launch the Interim Control Module in December 2000 should SM delays continue. The United States is leading a 15-nation partnership in building a cutting-edge on-orbit research facility. We will work through these current difficulties, and will continue building the ISS. We continue to strongly support the ISS program as an important investment in America's long-term future in science and technology.

I am particularly pleased to report to the Committee that this budget reflects robust funding for initiation of a new Space Launch Initiative. Safe, cost effective space transportation remains the key enabler of a more aggressive civil space program, and I believe the Space Launch Initiative puts us on the track to accomplish this. This initiative is a result of NASA's Integrated Space Transportation Plan that consolidated Space Shuttle Safety Upgrades, 2nd and 3rd Generation Reusable Launch vehicle technology programs, Alternate Access to Space Station and Aero-Space Base programs into a unified Agency strategy. It makes the critical investments that will enable major safety, reliability and affordability improvements for future generations of space transportation systems. The Space Launch Initiative makes an investment of $4.5 billion over 5 years for the 2nd generation RLV.

The Space Launch Initiative program is focused on initiating full scale development of a 2nd generation RLV architecture. It supports a 2005 competition to meet NASA's launch needs through purchase of commercial launch services by 2010, with the specific goal of achieving commercial ownership and operation of any new RLVs as early as 2010 if industry performs as promised. NASA's investments will focus on reducing technical, design and other programmatic risks through the use of large scale, long-life ground and flight tests and other risk reduction activities. We will also invest in reducing risk associated with systems that would be used for NASA-unique needs. The Space Launch Initiative is the product of more than a year of study and interaction between NASA and industry. The focus of the study has been on developing an integrated space transportation plan to meet NASA's needs for human and cargo delivery, while seeking synergy with the commercial space sector. The Initiative also includes procurement of near-term alternative access to the ISS for cargo transport needs on commercial vehicles.

This year we will undertake bold new science and technology initiatives in biotechnology, nanotechnology, and information technology. Three key emerging, interrelated technologies will provide NASA with a new pathway to revolutionize our missions and the scientific and engineering systems that enable them: biotechnology, nanotechnology and information technology. Over the past decade, there have been tremendous scientific breakthroughs in the understanding of these fundamental processes. We are now ready for our technology to move out and exploit what we are learning. We will develop and execute our missions with greater safety, performance and robustness, while continuously decreasing design cycle time and life cycle cost.

The first tier of NASA's technology strategy is biotechnology—the true revolutionary technology of the 21st century. Since the formation of the first cells on Earth, all living systems have developed an extraordinary capacity to adapt to rap-

idly changing conditions, build-in a high degree of resilience enabling them to overcome damage and evolve in response to new environments. In terms of size, memory, processing speed and energy consumption biological systems are up to a billion times better than the systems we build today. These are the characteristics NASA will build into its future missions and systems. NASA will apply the underlying principles of biological processes to all our missions. We will develop biologically-inspired materials that self-repair when damaged, structures that self-assemble to achieve near perfect final shapes. We will develop concepts for aircraft that change their shape in flight like birds to optimize performance or perform complex maneuvers in complete safety.

Nanotechnology provides the capability to manipulate matter at the atomic level. In the future, we will measure the way we design and build our systems by the atom, not by the pound. Today, we are developing material systems, at the molecular level, that are 100 times stronger than steel at 1/6 the weight. We will also develop sensors and detectors capable of responding to a single photon of light or the stimulus from a single electron. Using nanotechnology, we will build systems on a scale 1000 times smaller than today—at true molecular level. They will be based on concepts emerging from biology, quantum mechanics and chemistry, all of which have no current parallel. Following this hearing, in this very room, Dr. Richard Klaussner and I will sign a memorandum of understanding between NASA and the National Cancer Institute to develop new biomedical technologies related to nano-explorers that can detect, diagnose and treat disease here on Earth and in space.

NASA is also on a path to "revolutionize" the information technology revolution and apply it to our unique mission needs. Humans can process the equivalent of about a terabyte of data every second—that is equivalent to about 24 hours of television—as we process the data from our multi-sensory systems—sight, sound, smell, touch. We do this because we do not simply compute, we think. This third tier of our technology strategy will blur the notion of computer hardware and software and systems built from chips and black boxes. Our future systems will look and operate more like living systems than machines. We will build them with distributed sensory systems—like a central nervous systems—to allow us to monitor and control every function. Our computer systems will more resemble the human brain, with the capacity to learn.

The safety, productivity and health of the human in space supported by these technology tools are the foundation of our vision to explore. To catalyze this human-technology interaction, we will base our designs on biological processes and principles proven over the existence of mankind to adapt to changing and dynamic environments. The development and deployment of such technological tools will serve as extensions and expansions of human cognitive processes and blend inextricably with the human user.

The Bioastronautics Initiative will significantly improve long-term crew safety and health, and is the forcing function that focuses the research already underway to solving operational health and safety problems. Medical support systems will be developed by accelerating development and validation of countermeasures for the diagnosis, therapy, prevention and rehabilitation of crew on long duration missions aboard the ISS. Solutions to these space health problems find ready application to a multitude of health problems on Earth.

We are making new investments to enhance our Mars exploration strategy with funding to establish a Mars Communication Network, a system of communication satellites around Mars that will greatly increase the science return and overall success of future Mars missions. Eventually, this Network will enable researchers and the public to explore and experience Mars firsthand through live video links. The Administration has recognized the inherent risk in space exploration, and given NASA a vote of confidence by providing a total of almost $350 million in additional funding for Mars. In combination with the Mars Communication Network, these funds will allow us to pursue a sustained presence at multiple locations in and around Mars and build incrementally to support aggressive future goals. If successful, this approach to Mars could become a model for future missions to other research targets. As the President said in his State of the Union address, we must "set great goals worthy of a great nation." We are doing just that. This budget also contains new funding for new Discovery Program micromissions to facilitate new low-cost solar system research opportunities, and restores Space Science funding for the Flight Validation Program (formerly the New Millennium Program) that will enable us to develop and test revolutionary technologies to enable future missions.

A new Space Science program I am particularly excited about is Living With a Star, a new scientific research initiative to understand the Sun's impact on the Earth and space environment. The fiscal year 2001 budget includes funding to begin

Living With a Star. The program will deploy some of the most creative and advanced technologies to construct a network of spacecraft aimed at helping us understand our star, the Sun, and how it influences the Earth. We cannot talk about sending people to other planets without first understanding how astronauts would be affected by the Sun's radiation. How can we fully understand the Earth's climate system without understanding solar variability and its affect on the Earth's atmosphere? Using multiple spacecraft, these Solar Sentinels will be able to track Earth-directed coronal mass ejections and pave the way for future systems that can warn of impending danger to terrestrial power grids, our astronauts, and air passengers flying at high altitudes, and to national security and civil space assets. Given the importance of understanding and predicting solar variability to fundamental science, terrestrial climate, national defense, and technology, NASA has begun to develop collaborations with NSF, DOD agencies, FAA, and NOAA, and will pursue collaborations with the commercial space industry as well.

In Earth Science, we will continue to develop a full and comprehensive understanding of the total Earth system and the impacts of natural and human-induced changes on the global environment. Through recent technology efforts, we will shrink the size, cost, and development time for our missions planned for this decade. Following decades will see a web of sensors over the Earth in a variety of orbits, including constellations of intelligent microsatellites that target resources or major events happening on the Earth's surface. While pursuing our core Earth Science objectives, we will also provide the tools to apply satellite imagery and technology to generate the next great advances in weather and climate prediction, improve agricultural productivity, and advance the growth of the U.S. commercial remote sensing industry. These applications have the potential to enhance our quality of life and stimulate the development of new commercial products and services based on NASA-developed technology.

This budget includes funding for new initiatives in Aeronautics. Over the 5-year period from fiscal year 2001 through fiscal year 2005, the new Small Aircraft Transportation System (SATS) Program is funded at $69 million. The budget also supports a funding increase of $100 million for noise and emissions research over the same 5-year period, including the new Quiet Aircraft Technology (QAT) Program. SATS will develop vehicle and infrastructure technologies to reduce the accident rate of small aircraft to that of commercial transports, utilize the Nation's underused airspace and landing facilities at non-hub airports in all weather conditions, and increase capacity for efficient operations of commuter, regional and runway independent aircraft at hub airports. QAT will provide the technology to meet the NASA/FAA vision for a noise-constraint-free air transportation system that would contain the decibel contour within the airport boundaries, a 10 decibel reduction from 1997.

The fiscal year 2001 budget makes necessary investments in NASA's workforce and the NASA institution by providing additional funding for stabilizing civil service personnel levels at NASA's Space Flight Centers and addressing pressing facility issues. This will help keep NASA's highly skilled workforce safe and healthy by spreading the tremendous workload among more people. In addition, it will help NASA improve the safety and reliability of our unique assets by ensuring the right staffing levels are in place to improve the Space Shuttle and assemble the ISS. An increase of almost $600 million over 5 years will cover not only increased personnel salary and expense costs but also an FTE increase over the previous downsizing plans until 2004. The effect is to hold personnel levels steady at the fiscal year 1999 level at NASA's Space Flight Centers. An increase of almost $200 million over 5 years is included for facilities revitalization in order to reverse a long-term trend of declining facility condition, which is impacting safety and productivity. We have completed a Core Capabilities Assessment that identified the physical and human assets required to accomplish the Mission Areas and Center of Excellence assignments identified in our Strategic Plan. With this as a basis, we can now make investments in facilities with the assurance that those in which we are investing are essential for success of our missions and the safety of our personnel.

One of the many ways in which NASA establishes our relevance to the American people is through our education program. The NASA Education Program is comprehensive, addressing all levels of the education system from K–12 schools to colleges and universities. In all our education activities we strive to achieve education excellence by involving the educational community in our endeavors to inspire America's students, create learning opportunities, and enlighten inquisitive minds.

Included in the budget for fiscal year 2001 is a request for $1 million to begin a coordinated, Agency-wide internship program for undergraduate students. Through this program, we anticipate providing a diverse group of 200 students a 10-week internship program at a NASA Field Center. This program is critical to

complete a continuum of student programs that currently begin in high school and continue through graduate and post-graduate education. We have also listened to the Congress, and increased our baseline funding for Space Grant in this budget. The funding level represents an increase of $5.6 million over our previous request and is maintained in the outyears. An additional $7.4 million is included for the Minority University Research Program to continue the Science, Engineering, Mathematics and Aeronautics Academy (SEMAA) Program through competitive selections and to continue partnerships with other institutions in support of math, science, and technology education at all levels of education for under represented groups. While our budget for Academic Programs in fiscal year 2001 is below the overall fiscal year 2000 enacted level, it maintains our base level funding for our core programs but does not continue funding for Congressional earmarks.

NASA's proposed fiscal year 2001 budget of $14.035 billion signifies a strong commitment by this Administration to science and technology and recognizes the critical role it plays in stimulating the economy and developing the jobs of tomorrow. Now I would like to discuss in detail each of the Strategic Enterprises and major program areas.

NASA ENTERPRISE DETAIL

Human Exploration and Development of Space Enterprise

International Space Station

Compared to the fiscal year 2000 budget, the fiscal year 2001 budget request reflects an overall reduction in the budget and runout estimates through fiscal year 2005 of about $1.2 billion. Roughly $0.8 billion of this reduction is due to the movement of funding for the Phase 2 production of the ISS Crew Return Vehicle (CRV) to the Science, Aeronautics and Technology budget account. The fiscal year 2002–2005 funding estimates will reside in that account pending a decision in the next two years on whether to proceed with an X–38-based CRV design, in the context of broader decisions that NASA and the Administration will make regarding future space transportation architectures. There is also an approximate $0.4 billion reduction in other ISS funding over 5 years, in order to fund Agency needs and other high-priority activities such as the Bioastronautics initiative.

In 1998, we celebrated the birth of the ISS, as the first 2 elements were successfully launched and mated; the combined stack has now completed over 6,700 orbits. In 1999, flight hardware continued to be delivered to the Kennedy Space Center (KSC). We just successfully completed the most comprehensive systems integration test and evaluation at NASA since STS–1. It worked flawlessly. The Mission Sequence Test sequentially exercised all nominal crew and mission control interfaces planned for deployment of the U.S. laboratory, per the 5A flight plan, with actual hardware and software response. The test was performed as close to the in-flight configuration as possible. It included additional mission control to ISS interfaces not performed during previous multi-element tests, allowing engineers to validate operational flight plans and procedures. These tests—while critical to ensuring that the ISS will work in space as planned—have taken longer than planned, resulting in slips last year. However, as a result, we can now confidently say that we will be ready to launch the American equipment. Also, last October, on-orbit assembly planning paused after Russia encountered two setbacks in its long history of over 250 Proton launches, 95 percent of which have been successful. While these launch delays are unfortunate, they illustrate both the importance of integrated testing and the need for redundant launch systems, as the ISS program has with the Shuttle and Proton.

Decisions made at the General Designers Review in Russia on February 11 place the SM on a path to launch this summer in a launch window of July 8–14. Should the SM experience further delays or mission failure, we will launch the ICM in December 2000. Should the SM be successfully launched this summer, we will reconfigure the ICM to enable docking with the SM as early as 2001. I have clearly communicated to Mr. Koptev that the ISS program will move forward in 2000, regardless of whether the SM is ready for launch.

Relative to the Proton failure, its return to launch, and plans for launch of the SM (SM), RSA provided their plan and technical considerations at the General Designers Review. The failure was attributed to contamination and manufacturing non-compliances during 1992/93 timeframe. None of these engines is slated for future launch. However, several commercial parties have agreed to launch on inspected engines from later production sets. The plan for the SM is to launch it on engines upgraded to increase their resilience against these types of failures. The SM launch will follow 2 precursor flights using the same Proton modifications and upgraded engines, as well as other commercial Proton flights. NASA propulsion ex-

perts have reviewed these plans and are in agreement that the Russian approach provides a high degree of launch confidence. NASA has also asked the NASA Advisory Council (Stafford) Task Force on ISS Operational Readiness to review the findings of various Proton launch failure investigation teams with RSA's Advisory Expert Council and provide their views on the SM launch plan.

Delay in the SM launch also impacts Zarya, in that its flight certification period must be extended. NASA's plans include a Space Shuttle mission to the on-orbit ISS this Spring to perform critical maintenance on some of Zarya's systems to re-certify it for flight through December 2000, consistent with ICM contingency planning. This approach requires splitting the presently planned mission following the Service Module launch, 2A.2, into two missions designated 2A.2a and 2A.2b. The 2A.2a mission would occur this Spring to provide the needed maintenance on Zarya. The 2A.2b mission will be similar to the currently manifested 2A.2 mission in that it will prepare the SM for the arrival of its first resident crew in late 2000. Shuttle Orbiter Atlantis will be used for both missions, minimizing mission unique costs and enabling a reduced turnaround time for the second flight. Since some Shuttle missions have been delayed due to the Service Module/Proton problem, the addition of 2A.2a would not increase the annual Space Shuttle flight rate, nor materially affect our budget.

Program momentum is being maintained as KSC is taking delivery of new flight hardware with each passing month. Last year I told you of the on-going transition from development work into operations. This trend has accelerated in earnest with many elements for flights through 12A having been delivered to KSC including truss segments, attitude control system, communications system, the first solar arrays, thermal radiators, integrated electronics, and the U.S. Laboratory, "Destiny."

We have significantly reduced the amount of risk as elements have moved through the first set of integrated testing. These multi-element tests, while critical to ensuring that the ISS will work in space as planned, have taken longer than expected, resulting in slips to the U.S. Flight Elements Schedules. This summer, we will move into the second major set of integrated testing activity. This activity will verify ISS flight hardware to each other and to the orbiters. Also included in the test will be the mobile transporter, a movable base of the Station's Canadian mechanical arm that allows it to travel along the Station truss.

Progress on U.S. items has not been without challenges. Just last fall we determined the likely cause for a component failure in the ISS DC to DC Converter Unit (DDCU), the U.S. pacing component for flights 3A–5A. We are now working delivery of alternate parts to maintain our schedules.

U.S. flight elements are now prepared for the next major steps in the ISS assembly. By this fall, Flight 3A will carry the Z–1 Truss Segment, Control Moment Gyros (CMG), the third Pressurized Mating Adapter (PMA–3), Ku-band and S-band equipment, and extravehicular activity subsystem components. The Z–1 truss will provide a base for temporary installation of the P–6 photovoltaic module to Node 1. That will provide U.S.-based electrical power early in the Station's assembly process. PMA–3 will provide a Space Shuttle docking location for installation of the laboratory on Flight 5A. Russian Flight 2R will deliver the first long-duration crew, Commander Bill Shepherd, Soyuz Commander Yuri Gidzenko, and Flight Engineer Sergei Krikalev. We will also see the arrival of the first crew in a Soyuz spacecraft; it will remain attached to the ISS and provide an emergency return capability for the crew. Permanent human presence aboard the ISS begins with this expeditionary crew. By the close of Fall, Flight 4A is scheduled for launch, and includes the P6 Truss structure containing the long spacer, the Integrated Electronic Assembly (IEA), the P6 photovoltaic array, External Active Thermal Control System (EATCS) and additional S-band equipment. This launch will establish initial U.S. user capability by providing power generation and photovoltaic thermal control. In January 2001, the U.S. laboratory will be launched on flight 5A along with 5 integrated systems racks and the Human Research Facility (HRF) rack. The capability to conduct research aboard the ISS will begin with delivery and outfitting of the HRF. Flight 5A.1, is to be launched to continue the outfitting of the U.S. laboratory with 6 additional lab system racks and one HRF payload rack. The Italian-built Multi-Purpose Logistics Module (MPLM) will be used as the pressurized carrier for this hardware. Flight 6A will be launched to continue the outfitting of the U.S. laboratory with the addition of 2 stowage and 2 EXPRESS payload racks. Also included are the UHF antenna and the Canadian Space Station Remote Manipulator System (SSRMS), the "arm" that will help with Station assembly. MPLM–2, known as Leonardo, will be used as the pressurized carrier on this flight. The UHF antenna will provide space-to-space communications capability for U.S.-based EVA, while the SSRMS will be used to perform assembly operations on future flights. Flight 7A will launch the airlock and high-pressure oxygen and nitrogen. The addition of the airlock to the on-

orbit stack permits ISS-based EVA without the loss of environmental consumables such as oxygen. Flight 7A completes Phase 2 of the ISS Program. Finally, Flight 7A.1, and the initial utilization flight (UF–1) will complete the fiscal year 2001 schedule of activities.

As the program transitions into the assembly and operations phase, manufacturing activities are declining. Over 90 percent of the U.S. ISS development contract is complete, with the majority of flight hardware scheduled to be delivered to the launch site this year. With these changes, it is in the best interest of the Government to concentrate resources on assembly planning, operations and utilization readiness, and on the on-orbit assembly of the ISS. As such, NASA restructured the Prime contract to focus resources on the work remaining in the most efficient manner. The restructure provides the Government and Boeing flexibility in directing the work force at a time when fast responses to unanticipated problems are desirable. The restructure also provides incentive for Boeing to improve performance through a revised award fee system for the remaining work.

Relative to operations, the communications systems between Mission Control Center (MCC)-Houston, MCC-Moscow, and the ISS have been successfully demonstrated and avoided Y2K related issues. The U.S.-led international control teams have been vigorously exercised as they worked anomaly resolution, avoidance maneuvers, an ISS reboost and the first docking with the ISS.

NASA continues to evaluate program progress and take contingency steps to mitigate risk in case any partners have problems meeting their commitments. NASA is making good progress toward completing these steps. A key element in this plan is the development of the U.S. Propulsion Module. The Preliminary Design Review process for the Propulsion Module will be completed in June, leading to initiation of its critical design phase.

A second set of contingency plan activities is the purchase of unique Russian goods and services. As ISS development, assembly and operations have progressed, NASA has identified goods and services that would allow the implementation of the next steps of NASA's Contingency Plan and provide improved crew training and operational capabilities. The goods and services NASA intends to purchase are:

—outside the scope of what Russia has agreed to provide as part of its commitment to the ISS;

—uniquely available from Russia, and would be much more costly and significantly delayed, if purchased from U.S. or other sources; and

—needed to ensure timely availability of U.S. contingency capabilities.

Russia has a good record of on-schedule and on-budget delivery of items purchased, and NASA is confident in the timely delivery of these needed items. I believe that the provision of these goods and services will reduce risk to our crew and to the overall ISS program. Protecting the ultimate safety of our ISS crew and the investment of the American people is paramount in our decision to embark on this transaction. An Operating Plan change request was submitted to the Committee on February 11, and I thank you for your expeditious response. The most time-critical of the hardware, specifically a pressure dome and an Androgynous Peripheral Docking Adapter (APAS), need to be purchased in the very near future to support contingency scenarios. While the recent enactment of HR 1883, the Iran Nonproliferation Act of 2000, will affect the process by which NASA purchases these items from the Rosaviakosmos, HR 1883 provides for a streamlined reporting procedure to the Congress for the hardware of most immediate interest to NASA.

In the United States, development of Crew Return Vehicle (CRV) operational technologies through the X–38 program is progressing well, with testing of two 83 percent scale atmospheric flight vehicles, construction of a full scale space reentry vehicle, and testing of a full operational scale 7500 sq. ft. parafoil, the largest in the world. The first test flight of the full-scale parafoil was successfully completed in January 2000, with flawless deployment dynamics and a safe touchdown—a major project milestone. In a future Operating Plan adjustment, we plan to reallocate an additional $21 million in fiscal year 2000 for CRV Phase I development to assure success of critical validation tests and design. We are proceeding toward an fiscal year 2002 competition down-select to 2 contractors to get ready for a production decision. We will work with the Aerospace Safety Advisory Panel (ASAP) to make sure we have the safest design.

While NASA works aggressively toward deployment of a U.S. crew return capability, we have decided to move funding for the CRV production phase into the Science, Aeronautics and Technology funding line. Production funding will remain in this line while we work toward validation of the X–38/CRV approach as the safest way to provide the crew return function, and evaluate the potential of Crew Transfer Vehicle (CTV) concepts as an alternative approach. Until the arrival of the CRV, the Russian Soyuz will be the only means of crew rescue. The CRV was planned

to be available in May 2004 (based on the June 1, 1999 Revision E assembly sequence), but X–38 program delays and a cut in fiscal year 2000 appropriations to the CRV project has delayed availability by 12 to 18 months. Given the delays in assembly since the Rev. E assembly sequence was released, and the impact of those delays on 6-person readiness, most of the 12–18 month slip in CRV delivery should be accommodated in the new assembly schedule. If 6-person capability is achieved prior to availability of a U.S. crew return capability, the launch of a 6-person crew could be deferred a few months, or additional Soyuz crew return services could be purchased to fill the gap.

The contributions of our other International Partners will become more prominent as assembly progresses throughout this year. Two of the 3 Italian Multi-Purpose Logistics Modules (MPLM) and the Canadian Space Station Remote Manipulator System (SSRMS) have been delivered to KSC and are in preparation for launch. The third MPLM is in assembly in Turin. In late 2001, initial deliveries of the Japanese Experimental Module (JEM) begin to arrive in the United States. The European Columbus Orbital Facility is in production and is on schedule for delivery in early 2004.

Economic Development of Space

While much of the early effort regarding the economic development of space was focused on the ISS due to its enormous potential in scientific and business applications, NASA has also reached out into other space opportunities. We believe that the key to increasing and accelerating space commercialization, not just maximizing what is currently available or achievable, is to bring in new players—investors, customers, suppliers, and users—and make it easy for them to include space as part of their business strategies and operations. We solicited and incorporated inputs from all sectors of the economy as we worked on our approach for enabling the economic development of space.

Beginning in 1998, NASA committed to set aside at least 30 percent of the ISS payload capacity for commercial development. During 1999, we put in place the necessary management systems and processes with which to conduct a vigorous economic development program for the ISS. Process improvements made in the past year included: single point of entry process for all entrepreneurial offers; policies to protect private intellectual property and proprietary data; an ISS demonstration pricing policy to stimulate commercial investment and government/industry partnership; and, a soon-to-be published price list for using ISS resources such as research racks, crew time, power, and other resources. This integrated and inclusive approach has resulted in entrepreneurial offers from private companies wanting to use part of the ISS and related infrastructure for non-Government businesses. Most offers involve private investment and non-Government use of space assets.

We are also working on the development of a Non Government Organization (NGO) for ISS utilization management. This has the potential to greatly enhance the scientific and commercial uses of the ISS, while at the same time freeing up precious NASA resources to concentrate on pushing the boundaries of science and technology.

Near term commercialization opportunities include NASA TV and its related multi-media infrastructure; commercial habitation module; reimbursable space shuttle flights; remote sensing, multiple use research centers; and solar power platform for communications and surveillance. With the help of the Administration and Congress, we have an exciting start in our initiative for the economic development of space. The pending launch of the ISS laboratory module, and the start of the permanent human presence in space should take us to yet another level in our quest to open up space to increasingly more people and applications. Our next step is the inclusion of and coordination with our international partners to further expand the commercial opportunities and reach of our assets.

All recent policies, reports, and procedures can be found at http://commercial.nasa.gov/.

Space Shuttle

The fiscal year 2001 Space Shuttle budget is $3.165 billion, a 6.2 percent increase over the fiscal year 2000 budget. The Space Shuttle continues to prove that it is the safest and most versatile launch vehicle ever built. The team has proven again that safety, not schedule, dictates launch readiness. I salute them.

The Space Shuttle manifest currently reflects 9 missions scheduled to fly during fiscal year 2001—7 ISS assembly flights, the second half of the Hubble Space Telescope's third servicing mission, and a research flight. This is a significant increase over the 4 missions that were conducted in both fiscal year 1998 and fiscal year 1999, and a further increase over the 5 missions currently manifested for flight in

fiscal year 2000. The fiscal year 2001 budget of $3.165 billion will enable the system to successfully meet its goals to: (1) fly safely; (2) meet the flight manifest serving diverse customers; (3) improve the system; and, (4) improve supportability. This year, and in the near-term, the manifest is dominated by ISS assembly.

We must continue to ensure the Space Shuttle's viability as a safe, effective transportation system and scientific platform. The Space Shuttle will need to be capable of supporting the critical human space transportation requirements for ISS assembly and operations and through at least a significant portion of the 10 years of the completed Space Station's life. To accomplish this, we must continue to invest in the system's safety and supportability until a replacement vehicle is available. We have found that investing in upgrades provides, not only a safer vehicle, but one that is more reliable and one that is easier to maintain.

I appreciate the additional $25 million that the Congress provided in fiscal year 2000 to invest in high priority safety upgrades and start the process. In addition, we reprioritized the existing budget within Human Space Flight to bring the total fiscal year 2000 budget for high priority safety upgrades to $50 million. The Space Shuttle program is initiating two high priority safety upgrades and has recommended additional investments for study. In the fiscal year 2001 request, the Administration has provided additional funding to continue the initiatives that started in fiscal year 2000, as well as additional high priority safety upgrades that are being funded in fiscal year 2001.

I have directed that safety upgrades be developed and implemented into the Orbiter fleet no later than 2005 to realize the benefits of these high priority safety upgrades to the fullest before we transition to a Space Shuttle replacement. I am happy to be able to report that work on these upgrades in currently underway. Because safety and reliability benefits can be realized from investing in the Space Shuttle, additional investment candidates have been identified for the Orbiter and propulsion elements of the vehicle. Examples include the Block III Space Shuttle Main Engine (SSME), the Solid Rocket Booster (SRB) Advanced Thrust Vector Control (TVC), and the Electric APU or Solid Propellant Gas Generator (SPGG). These candidates will be studied, along with other upgrades, personnel, facility or other safety investments, to validate priorities and cost in fiscal year 2000 prior to decisions whether to initiate their implementation or development in fiscal year 2001 as part of the Shuttle safety allocation. Additional studies are being conducted in several areas such as the Space Shuttle's Thermal Protection System (TPS) lower surface tile upgrades, propulsion system, and hazard protection during processing. Completion of these studies is vital to successfully supporting our safety efforts and will be complemented by outside reviews.

The Administration's fiscal year 2001 budget proposes to redirect funding identified in the fiscal year 2000 appropriation bill to partially pay for another dedicated research mission into safety investments by hiring additional civil service personnel at the Human Space Flight Centers, and accelerating the development of the Space Shuttle safety upgrades. These are very high priorities for this Agency. I am also a firm believer in the value of providing sufficient research opportunities to the science community impacted by the delays in the Space Station's assembly. I agree with Congress on the merits of doing so. That is why we have plans to fly a research mission (STS–107) in early fiscal year 2001, and use increased Shuttle middeck locker opportunities during Shuttle assembly flights. Over the next five years, we plan to increase the number of investigators in Life and Microgravity research to enable us to take advantage of every flight opportunity and we must continue to focus limited resources on getting ISS built and its research hardware developed as soon as possible.

Space Shuttle Independent Assessment Team

As a result of the ascent anomalies experienced on STS–93, on September 7, 1999, Associate Administrator for Space Flight, Mr. Joseph H. Rothenberg, chartered the Space Shuttle Independent Assessment Team (SIAT). Dr. Henry McDonald, Director of the Ames Research Center, chaired an independent technical team to review the Space Shuttle systems and maintenance practices. The team was comprised of NASA, contractor, and DOD personnel and examined NASA practices, Shuttle anomalies, and civilian and military experience."

The SIAT began work on October 4, 1999, and concluded their activities with a written report, submitted to Mr. Rothenberg on March 7, 2000. The SIAT focused their activities in the following technical areas: Avionics, Human Factors, Hydraulics, Hypergolics and Auxiliary Power Unit, Problem Reporting and Tracking Process, Propulsion, Risk Assessment and Management, Safety and Mission Assurance, Software, Structures, and Wiring. The Team's goal was to bring to Shuttle maintenance and operations processes a perspective from the best practices of the external

aviation community. The Johnson Space Center, the Lead Center for Human Space Flight and the Space Shuttle Program, will provide a plan or response to the short term recommendations in June. The Program's responses to the intermediate and long-term recommendations will follow in August and October, respectively. Four team recommendations were reviewed and closed prior to return to flight in December 1999. The fiscal year 2001 budget includes significant increases for investments in Shuttle safety that could be used to address these issues.

Human Space Flight Workforce

As NASA builds the ISS and supports the infrastructure and upgrades to the Space Shuttle program as well as its Expendable Launch Vehicle (ELV) commitments over the next 5 years, the workload will increase steadily. Internal and external workforce assessments have convinced NASA management that civil service FTE targets at NASA's Human Space Flight (HSF) Centers must be adjusted. As mentioned earlier, from internal reviews, such as the Core Capabilities Study, to external evaluations by the ASAP and the Space Shuttle Independent Assessment (McDonald) Team, it became apparent that the HSF workforce required immediate revitalization. Five years of buyouts and downsizing have led to serious skill imbalances and an overtaxed core workforce. As more people leave, the workload and stress remaining increase, with a corresponding increase in the potential for impacts to operational capacity and safety. HSF Centers will begin to accelerate hiring in fiscal year 2000, in order to address immediate critical skill shortfalls. After the initial hiring of 500 new personnel across the four HSF Centers in fiscal year 2000, HSF workforce trends will begin a one-for-one replacement process and will allow HSF Centers to attain a steady state in civil service employment by fiscal year 2001. We will continue to monitor HSF Center hires and attrition, ensuring that workforce skill balances are achieved and maintained.

NASA will work with OMB in the coming months, to conduct a personnel review with an eye towards the future. This review will assess management tools and innovative approaches for personnel management that might best equip NASA to evolve and adapt our civil service workforce in the future. This will be particularly important as we continue our transition from operations to a focus on advancing the frontier with cutting edge research and development in science and technology.

Expendable Launch Vehicle Mission Support

NASA's Expendable Launch Vehicle (ELV) team coordinated the launch of 10 ELV missions during the past year. The team supported launches from Cape Canaveral Air Station, including the Mars Polar Lander in January, Stardust spacecraft in February and the Far Ultraviolet Spectroscopic Explorer (FUSE) spacecraft in June. The NASA ELV team also supports launches from Vandenberg Air Force Base in California making it a bi-coastal team. The team supported the successful launch of ARGOS in February, the Wide-Field Infrared Explorer (WIRE) spacecraft in March, Landsat 7 in April, the TERRIERS satellite in May, the Quick Scatterometer (QuikSCAT) mission in June, and the Terra and AcrimSat spacecrafts in December.

There are 2 launch services competitions in work this year. The NASA Launch Services (NLS) acquisition providing launch services for future NASA missions will be completed. These contracts provide for awards to multiple suppliers with vehicles that have a demonstrated flight history. Also, the Next Generation Launch Services (NGLS) acquisition will be initiated. NGLS will enable competition for the emerging launch services companies with little or no flight history to offer launch services to NASA. Last year, I met with the CEOs of entrepreneurial startup companies, and NASA has taken a number of steps to ensure that we can create an opportunity for them to compete with the major launch companies. The ELV Mission support budget for fiscal year 2001 is $30.6 million. The fiscal year 2001 budget provides funding to support NASA's intention to award as many as five indefinite delivery/indefinite quantity launch service contracts to provide launch opportunities for university, science and technology payloads.

Space Operations (SOMO)

A new era in space communications began in January 1999, with the implementation of the Consolidated Space Operations Contract (CSOC). A major objective of the CSOC is to reduce NASA's space operations costs while continuing to deliver high quality services. Operations performance has continued to be of high quality in this first full year of the SCOC contract. With respect to savings, in the fiscal year 1998 budget to Congress, NASA reduced its budget in anticipation of CSOC savings and we do not expect to see any significant additional savings in the first few years of the contract.

Consistent with Congressional direction, NASA provided a CSOC commercialization plan in November. The plan addresses the purchase of space communications services from the private sector as well as the sale of available capacity from our existing NASA capabilities. As an example of this commercialization effort, CSOC is obtaining the use of commercial facilities to supplement the current NASA polar ground network. Additionally, all wide area network telecommunications are now being provided through commercial arrangements. We will be conducting a vigorous effort in fiscal year 2000 to increase the use of emerging commercial capabilities to meet our space communications and operations needs.

HEDS Technology/Commercialization Initiative

The Human Exploration and Development of Space (HEDS) Technology/Commercialization Initiative (HTCI) will support studies, technology developments and demonstrations that advance safe, affordable and effective future programs and projects of human exploration and discovery, while advancing the commercial development of space. The HTCI will pursue technologies and infrastructures for the future human exploration of space that also support commercial space development by making high-leverage investments that will enable progress toward innovative systems concepts and breakthrough technologies.

Life and Microgravity Science and Applications

NASA's Life and Microgravity Sciences and Applications Program is a partner in NASA's Human Exploration and Development of Space (HEDS) Enterprise. The program conducts ground- and space-based investigations to gain new knowledge to advance the health and safety of the astronauts in space. This interdisciplinary research will also increase the fundamental knowledge of biological, physical, and chemical processes; enable the development of space for human enterprise; and create new products and services. This knowledge and new technologies will be transferred to the private and government sectors as broadly as possible within the United States.

The fiscal year 2001 budget request of $302.4 million for Life and Microgravity Sciences and Applications is 10 percent higher than fiscal year 2000, and will support a research base attracting new investigators (for a total of 986), as well as expanding cooperation with other agencies. This program will take advantage of the opportunities presented by the deployment of the Destiny laboratory to the ISS and other opportunities to access space. Early in the assembly phase of the ISS, research will concentrate on investigations taking advantage of the Human Research Facility (HRF) and the EXPRESS racks. This research will focus on identifying and improving the spacecraft environment, habitability and crew health. To help maintain NASA's research communities during the ISS build-up, NASA plans to fly a research mission (STS–107) in early fiscal year 2001, and use increased Shuttle middeck locker opportunities during Shuttle assembly flights.

A new effort this year is the Bioastronautics Initiative, which will significantly improve crew safety and health aboard the ISS, and further strengthens research already underway to focus on the health, safety, and performance of humans in space. This initiative will accelerate research and development of solutions for diagnosis, therapy, prevention, and rehabilitation of crew on long duration missions aboard the ISS.

The Life and Microgravity Science and Applications program has embarked on a focused program to develop advanced technologies that are critical for long-duration space flights to monitor and enhance human health, safety and performance. This research in biologically inspired technology is being fostered through dedicated NASA Research Announcements (NRAs). These fields of research have great potential for application to health care issues here on Earth. I have also established a formal collaboration with the National Cancer Institute (NCI) in the area of biologically inspired technology. This is part of the Bioastronautics initiative and is being led by the NASA Chief Scientist.

A major portion of the Bioastronautics Initiative will support the National Space Biomedical Research Institute (NSBRI). It is a consortium of 12 U.S. medical research academic institutions led by Baylor College of Medicine. These institutions and others will use the knowledge gained by working with NASA to improve health maintenance and care for patients on Earth. NASA is currently evaluating options for and benefits of integrating facilities and capabilities where astronauts, medical professionals, scientists, engineers, and operational specialists could interact as a team in accomplishing this Bioastronautics Initiative.

NASA's Life and Microgravity Science and Applications research and development activities have also provided benefits in other areas such as improvements for the visually impaired which have been advanced by the development of an optical detec-

tor by the NASA Space Vacuum Epitaxy Commercial Space Center. Growth of 3-dimensional active heart tissue in the NASA bioreactor has also been accomplished. Successful engineering of heart tissue could eventually be used to repair damaged heart tissue inside the body, test new drugs on heart diseases, and study general heart development and function.

Space Science Enterprise

The fiscal year 2001 Space Science budget of $2.4 billion represents an increase of 10 percent over the fiscal year 2000 enacted level. The Space Science Enterprise is the arm of NASA that looks up, out, and back in time . . . at planets, stars, galaxies and other phenomena that populate our Universe. Despite the vastness and complexity of the Universe, the ultimate goal of all Space Science missions and research can be narrowed down to pursuing answers to three fundamental questions: How did the Universe begin and evolve? How did we get here? Are we alone?

Mission by mission and scientific discovery by scientific discovery, we are getting closer to the answers we seek. In recent years, space science discoveries have rewritten textbooks, challenged long-standing scientific beliefs, and inspired a sense of awe in the inhabitants of planet earth as we contemplate our place in this amazing cosmos.

Though there were both ups and downs for NASA's Space Science Enterprise this year, overall there was a wealth of compelling science delivered by this program.

Losing Mars Climate Orbiter and Mars Polar Lander back-to-back was a blow not only for the Space Science Enterprise, but also for NASA as a whole. However, as has been the case at various times throughout this Agency's 40-year history, we are going to learn what we can from these losses, change our approach where it is prudent to do so, and move on. Right now we have an expert team studying these failures and our entire Mars program architecture. This is a very important study for NASA, and we look forward to having their analyses and recommendations. One of the most exciting Space Science events of the past year was the launch of the long-awaited Chandra X-ray Observatory (CXO), the third of NASA's four Great Observatories. In July, the Space Shuttle Columbia, commanded by Colonel Eileen Collins, carried the CXO to space and sent it on its way to a highly elliptical orbit, where it is studying the wonders of the Universe in the X-ray part of the spectrum. As you have already seen, the images from Chandra taken during its short time in space are phenomenal and are a wonderful complement to the dazzling images and important scientific discoveries that the Hubble Space Telescope (HST) has delivered in the ultraviolet, visible, and near infrared wavelengths.

I am pleased to report that following the successful mission of STS–103 in December, the Hubble Space Telescope is back and better than ever. Thanks to new gyroscopes, a new computer, and a host of other upgrades, HST is more powerful and robust than at any other time in its almost-ten-year history. In addition to the thousands of breathtaking images that the telescope delivered last year, one result was a long-awaited, scientific coup: after eight years of painstaking measurement, Hubble scientists found a value for how fast the universe is expanding. This rate of expansion, called the Hubble Constant, is essential to determining the age and size of the Universe, which scientists now believe to be about 12 billion years. Measuring the Hubble Constant was one of the 3 major goals for the telescope when it was launched in 1990.

In planetary news, the Mars Global Surveyor spacecraft has given us the first global, three-dimensional map of the Martian surface. This incredible database means that we now know the topography of Mars better than many continental regions of Earth. This mapping mission has revealed many new insights about Mars' varying topography including an impact basin deep enough to swallow Mount Everest, mysterious magnetic lines on the ancient surface reminiscent of plate tectonics on Earth, and weather patterns raging across the North Pole. This new global map of Mars is changing our fundamental understanding of the red planet and will likely influence scientific research of Mars for years to come. The increasingly detailed high-resolution map represents 250 million elevation measurements gathered in 1998 and 1999.

The Cassini spacecraft, currently on a journey to Saturn, completed a highly accurate swing-by of Earth in August. This fly-by was necessary to give Cassini a boost in speed, sending it toward a rendezvous with Saturn and its moon Titan in 2004. Cassini will flyby Jupiter in December 2000.

Astronomers, racing the clock, managed to take the first-ever, optical images of one of the most powerful explosions in the Universe—a gamma ray burst—just as it was occurring on January 23, 1999. Such bursts occur with no warning and typically last just for a few seconds.

We also had some exciting news about our own star, the Sun. NASA-sponsored scientists have discovered that an S-shaped structure often appears on the Sun in advance of a violent eruption, called a coronal mass ejection, which is as powerful as billions of nuclear explosions. Early warnings of approaching solar storms will prove useful to power companies, the satellite communications industry and organizations that operate spacecraft, including NASA.

I think most of us, on a day-to-day basis, take the Sun for granted. We know it is always there . . . big and yellow and warm. Kind of like a friend we are always happy to see. But, I want to remind you that the same Sun is also a huge, violent ball of energy. The Sun gives off about a million tons of matter every second—and that is just on an average day. Occasionally, the Sun has explosions known as coronal mass ejections, the largest of which can have the energy of 1 billion megatons of TNT and eject 10 billion tons of solar gas. Even though by the time this solar matter reaches the Earth's magnetic field it is diluted by its 93-million-mile journey, its effects can still be dramatic and far-reaching. Solar disturbances can affect civilian and military space systems, human space flight, electric power grids, GPS signals, high-frequency radio communications, long-range radar, microelectronics and humans in high-altitude aircraft, and terrestrial climate.

Recognizing the critical role that solar events can have on Earth, the fiscal year 2001 budget includes an exciting new initiative. As I mentioned earlier in my testimony, this new initiative is called "Living with a Star," and it will undertake the most comprehensive study of the Sun and its interaction with the Earth to date. This is a major initiative that will take the talents of many, many people—people at NASA, in other Government agencies, academia, and the private sector. Working together, I know we will reach the ultimate goal of this program, which is to help astronomers understand and predict storms and other solar phenomena that can have a direct and often critical impact on Earth and its citizens.

This budget includes an increase of 17 percent for continued aggressive programs in Solar System Exploration that will enhance the science return and overall success of future mission to Mars and other key research targets. This is a vote of confidence from the Administration on behalf of the American public that we will fix what is wrong, develop a more robust program, and continue to explore the red planet. The budget supports a Mars Communication Network and other potential sustained presence concepts that will enable us to build incrementally towards aggressive future goals at multiple locations in and around Mars. The budget also includes additional outyear funding that will enable us to apply such research capabilities to other future solar system targets.

The budget request also features funding for a new branch of an existing program. Called "Discovery Micromissions," this series of missions to various Solar System targets will be similar to our Small Explorers program, enabling regular small, low cost missions throughout the solar system and creating new opportunities for university-based research.

NASA's fiscal year 2001 budget request provides strong support for a robust technology base, as evidenced by funding for the Intelligent Systems Initiative. Although this funding will allow the Agency to pursue a broad range of information technology investments, we will place highest priority on investments to enable robotic networks that support new approaches to our Solar System exploration programs. In a related field, NASA has increased the budget for nanotechnology. This investment in microminiaturization and related technologies is crucial for future exploration and allows us to participate in the new interagency nanotechnology initiative. And finally, this budget request provides for Astrobiology instrumentation and technology research and for a restructured Flight Validation Program through fiscal year 2005.

The President's proposed fiscal year 2001 budget supports a robust and scientifically diverse Space Science program with nine planned launches this calendar year. It allows us to continue studying the Universe we live in and develop the technologies necessary to expand our presence in it. Profound scientific discoveries and glimpses of new phenomena occurring in the Universe have long been hallmarks of this great program. This budget request ensures that the Space Science Enterprise will continue to bring value and wonder to the American public.

Earth Science Enterprise

The President's budget request for Earth Science in fiscal year 2001 is $1,405.8 million, down $37.6 million from $1,443.4 million in fiscal year 2000. This budget reflects a decrease in funds for observing systems and an increase in research and technology as we pass the peak of development of the Earth Observing System (EOS). Fiscal year 2001 continues formulation of the National Polar-orbiting Operational Environmental Satellite System (NPOESS) Preparatory Program (NPP), a

cooperative program between DOD, NASA and NOAA, that will be launched in 2005. NPP will simultaneously continue the Terra and Aqua mission research measurements and demonstrate new and innovative sensors for the NPOESS.

From our birth as the Nation's civilian space agency, NASA has used the vantage point of space to view the Earth in order to understand how it functions as a dynamic system of land, oceans, ice, atmosphere, and life. We give people a "window on the world" to understand how it changes, and what the impacts of those changes might be on human civilization.

The year 1999 marked a milestone in humanity's quest to understand our home planet. We began deployment of the EOS series of satellites, the first attempt to examine all major interactions among the key components of the Earth system. Deployment of the EOS began with the launch of Landsat 7, the cornerstone of the world's space-based land remote sensing efforts, with wide application in agriculture, forestry and regional planning in addition to its scientific value. Terra, the flagship satellite of the EOS, was successfully launched in December and the activation and checkout of its instruments are proceeding. In April, NASA launched the QuikSCAT satellite to resume global measurement of winds at the ocean surface to improve short-term weather prediction and tracking of major hurricanes and tropical storms globally. Also in December, we launched AcrimSat, an instrument that extends our measurement of variability in the output of the Sun.

Fiscal year 1999 was a year of substantial scientific accomplishment in our understanding of the major elements that comprise the Earth system using satellites launched in prior years, along with a variety of aircraft campaigns and ground-based research. Using data from the NASA/Japan Tropical Rainfall Measuring Mission (TRMM), the Earth Science Enterprise (ESE) reduced the uncertainty in measuring rainfall over the tropics by one half, thus improving short-term weather prediction and availability of fresh water globally. Over the ice caps, NASA and other researchers determined the thinning and thickening rates for the Greenland ice sheet. We conducted an international field experiment in the Amazon to help understand the role of vegetation on Earth in removing carbon dioxide from the atmosphere.

This year promises to be equally exciting, as we begin to see the first results from the Terra mission. Eight Earth science missions are planned for launch this calendar year, including 3 deferred from 1999 to assure mission success. Among these 9 missions are several important complements to the EOS. The Shuttle Radar Topography Mission, completed in February, will provide a 3 dimensional digital map of nearly all the inhabited portions of the Earth's land surface. The QuikTOMS mission will continue our fulfillment of our Congressional mandate for ozone monitoring. The first Earth-oriented New Millennium Program mission is scheduled to fly this calendar year, and will demonstrate new and lower cost land imaging technologies.

Within the President's fiscal year 2001 budget request for Earth Science, the largest activity is the continued deployment of the EOS ($447.1 million). This calendar year will see the launch of the Aqua satellite, the second of the three major components of EOS (along with Terra in 1999 and Chem in 2002). Aqua will provide highly accurate atmospheric temperature and humidity measurements essential for climate change research. Other EOS components in fiscal year 2001 are ICEsat, which will measure the topography of the world's major ice sheets, and the SeaWinds instrument that will continue the ocean winds measurements currently taken by QuikSCAT. Fiscal year 2001 EOS funds will also continue development of Chem and SORCE.

This budget also includes $120.4 million for Earth Probes, a series of small, rapidly developed missions such as the ESSP that explore unfamiliar Earth system processes. Fiscal year 2001 will see the launch of the Gravity Recovery and Climate Experiment (GRACE) which will provide a precise mapping of the Earth's geoid, thus substantially improving the accuracy of our satellite measurements of sea level. The Triana mission has just completed a review by the National Academy of Sciences, with very favorable results. Triana will detect sunrise-to-sunset changes in ozone, aerosols, clouds and surface ultraviolet radiation as well as provide warning of space weather events. Development will continue on two new ESSP missions, PICASSO and Cloudsat, which will make 3-dimensional measurements of aerosols and clouds in the atmosphere.

Implementation of the Earth Observing System Data and Information System (EOSDIS) will continue and is funded at $252.0 million in fiscal year 2001. Problems encountered in 1999 have been overcome, and EOSDIS is meeting its requirements for operation of Terra and management of the already extensive set of Earth remote sensing data collected from existing satellites.

Within a nearly level budget, the ESE is increasing its investment in research and advanced technology development by $63.9 million over last year to $533.3 million in fiscal year 2001. The ESE has updated its research strategy for the next decade, highlighting specific questions about forces of change acting on the Earth system, and how the Earth responds.

The fiscal year 2001 budget also funds a series of partnerships that may turn our scientific results into practical applications. Topic areas of these partnerships include fire hazard prediction and water availability in the West, farming and forestry in the upper Midwest and the South, as well as urban and regional planning in the Northeast. The standard of success for applications and commercial partnerships is that they become self-sustaining entities based on the quality and utility of the applications products we help them demonstrate. In keeping with NASA's continued commitment to meet research needs, to the extent possible, through scientific data purchases, the Commercial Remote Sensing Program expects to identify new commercial sources of Earth Science data.

Fiscal year 2001 promises to be a year of substantial payoff from prior investments in the EOS program, as well as a year of new opportunities from small missions and from partnerships that demonstrate new uses of Earth remote sensing data across the Nation.

Aero-Space Technology Enterprise

The President's fiscal year 2001 request for NASA's Aero-Space Technology Program is $1.193 billion, which represents an increase of $68 million increase over fiscal year 2000. We have restructured this budget to reflect our priorities and to maximize the benefit arising from synergy between aeronautics and space transportation technologies. The increase represents expanded investments in existing programs (Aviation Safety, Flight Research, and Information Technology) and new programs (Space Launch Initiative, Small Aircraft Transportation System, and Quiet Aircraft Technology). These increased investments and new initiatives reflect our priority objectives in safety, aviation systems capacity, noise reduction, next-generation design tools, experimental aircraft and access to space. These investments also support out collaborative effort with the FAA and DOD to achieve the national aviation goals described in the National Science and Technology Council's "National Research and Development Plan for Aviation Safety, Security, Efficiency and Environmental Compatibility."

Aero-Space Technology Programs

The Enterprise is making great progress in accomplishing all 3 of its major goals, which we refer to as "Pillars for Success"—Global Civil Aviation, Revolutionary Technology Leaps, and Access to Space.

Pillar One, Global Civil Aviation.—Over the years, NASA has embraced safety as its number one core value, articulating an unwavering commitment to safety for the public, astronauts and pilots, and the NASA workforce, as well as for high value equipment and property. Although flying is the safest of all the major modes of transportation, the predicted tripling of air traffic over the next 20 years will render even today's low rate of less than two accidents per million flights unacceptable. Therefore, as part of our commitment to the public, we have taken dramatic steps, through joint FAA and NASA research, to assure unquestioned safety for both travelers and crew on our Nation's commercial airlines. The goal of NASA's Aviation Safety Program is to reduce the aircraft accident rate by a factor of five within 10 years, and by a factor of 10 within 25 years.

Of the many technologies now under development, two may have profound impacts on aviation safety. The first is Synthetic Vision, which will turn every flight into a clear daylight flight and alert the crew to any safety hazard. This system will greatly reduce the single most critical factor impairing the safety of worldwide aviation operations—controlled flight into terrain (CFIT). The second is Flight Data Analysis Tools, which will be used by airlines and governments to identify and fix problems before they cause incidents or accidents. The Agency is also collaborating with the Canadian Atmospheric Environmental Services and the Federal Aviation Administration (FAA) in researching the formation of ice on aircraft wings. In the area of weather prediction and adaptation, NASA researchers continued their work on the Advanced Vortex Sensing System (AVOSS)—a key to both improving the safety of flight and reducing the impact of the growing demand for air travel. New features included improvements in wake prediction, observational weather systems, and real-time weather forecasting.

With regard to environmental issues, NASA's collaborative initiative with Pratt & Whitney demonstrated that the company's low-emission combustor can reduce nitrogen oxide (NO_X) levels by half during landing and take-off cycles. It also showed

comparable reductions in cruise NO_X emissions, carbon monoxide, and unburned hydrocarbons. NASA has also been effectively addressing noise pollution, through development of a new aircraft noise impact model that help reduce noise by optimizing aircraft approach trajectories. The new Quiet Aircraft Technology program will extend this research by developing technologies for engine and airframe noise source reduction and advanced operations to reduce community noise impact.

Another important development is NASA's increasing cooperation with the U.S. Air Force, exemplified by the creation of a new Air Force-NASA Partnership Council for Aeronautics. The Council is initially focusing on six areas, one of which is classified. The five non-classified areas are: Aging Aircraft, Propulsion, Concurrent Airspace Operation of Autonomous Aircraft, Simulation-Based Acquisition /Intelligent Synthesis Environment, and Advanced Vehicle concepts.

Pillar Two, Revolutionary Technology Leaps.—Progress continued during fiscal year 1999 in NASA's general aviation initiatives. Researchers completed assembly and initial performance and operability testing on a new advanced internal combustion engine will be demonstrated on experimental aircraft at the Summer 2000 Oshkosh Fly-In in Wisconsin. Also, in the context of NASA's Advanced General Aviation Transport Experiment (AGATE) program, researchers made final selections of systems deemed most suitable for future integration into an experimental general aviation aircraft. Selected systems include both improved structural materials and an Intuitive Pilot Interface, which provides pilots with a graphic depiction of a desired flight path—or "Highway in the Sky"—taking into account weather, traffic, terrain and any airspace issues, without the use of voice communications. The new Small Aircraft Transportation System (SATS) program will apply this research in a focused demonstration of how increased use of safer, small aircraft could improve air system crowding. This new initiative has the potential in the long-term to change the way people in outlying communities view air travel.

Remotely piloted aircraft (RPA) have also been a focus of NASA research. In July 1999, the Environmental Research Aircraft and Sensor Technology (ERAST) project conducted a flight demonstration at Edwards Air Force Base involving the Altus vehicle, which is capable of performing science missions of greater than 4 hours above 55,000 feet in areas such as the polar regions. The first low-altitude flight of the Helios RPA was conducted in September 1999—the first step on the way to eventual flight at an altitude of 100,000 feet in fiscal year 2001.

Pillar Three, Access to Space.—I am very excited about our new Space Launch Initiative and I believe that no effort will be as important to the future of this Enterprise and this Agency as this one. In recent years, NASA has made significant progress in transitioning routine space operations to the private sector so that taxpayer resources can be concentrated on high-leverage science research and technology development functions. However, commercially competitive, privately-owned, low-cost, safe, Earth-to-orbit launch for human space flight remains the most critical, fundamental step this Agency can take to enable more aggressive civil space exploration and to stimulate new space commerce. If successful, the Space Launch Initiative will mark a dramatic maturing of our space program, with the potential to revolutionize NASA's and the industry's roles and responsibilities. The Initiative more than doubles fiscal year 2000 funding and supports our goal of conducting a competition in 2005 to meet NASA's human space flight needs through commercial launch service procurements by 2010 if industry is capable of delivering on its promises.. To achieve this goal, the Space Launch Initiative will pursue a three-pronged strategy: (1) technical risk reduction activities to support full-scale development decisions for at least two commercially competitive reusable launch vehicles prior to the 2005 competition, (2) hardware development to meet NASA-unique needs such as crew transport and cargo return on commercial launch vehicles that cannot economically meet these requirements alone, and (3) launch service procurements to provide alternative access for select Space Station needs in the near-term. In addition to these activities, the Space Launch Initiative also incorporates ongoing NASA space transportation Pathfinder programs.

Among the most important of these ongoing programs are NASA's X-vehicle demonstrator programs. The X–33 program made considerable progress in fiscal year 1999 by beginning testing of the world's first aerospike engine at the Stennis Space Center. Engine testing is on track to be completed this summer. A significant challenge also arose, involving a structural failure of the X–33's unique, composite material liquid hydrogen fuel tank after successful completion of a rigorous testing sequence. We are dealing with cutting-edge technology with large composite designs, which have never been tested before. An independent investigation team will release a report on the X–33 incident within the next month. In NASA's X–34 program, progress was evident throughout fiscal year 1999, with delivery of the first flight vehicle and captive carry tests by the companion L–1011 vehicle successfully carried

out. Stennis Space Center also conducted hot fire testing of the X–34's innovative Fastrac engine. In addition, the wing was installed on the second X–34 test vehicle, for use during the X–34's first powered flights.

Research involving highly innovative space transportation propulsion systems took a step forward with the ground testing of a pair of hydrogen-fueled Rocket Based Combined Cycle (RBCC) flowpath models. The transition from air-augmented rocket to ramjet operating mode was demonstrated in a unique new facility that allows continuous variation of the simulated mach number. Beyond this, NASA's Propulsive Small Expendable Deployer System (PROSEDs) experiment is exploring the potential role of electrodynamic tethers as a means of propulsion in space, without the use of propellants. A Critical Design Review of the project was carried out in early September 1999, and the experiment is scheduled for launch in August 2000. In addition to the Space Launch Initiative, NASA's fiscal year 2001 budget request includes $1.2 billion over five years, an increase of approximately $200 million, for a base level of space transportation research that supports 2nd and 3rd generation RLV technologies.

Commercial Technology Programs

Since its inception in 1958, NASA has been charged with ensuring that the technology it develops is transferred to the U.S. industrial community, thereby improving the Nation's competitive position in the world market. The fiscal year 2001 budget request of $135 million continues this important aspect of our mission. The Agency's commercialization effort encompasses all technologies created at NASA centers by civil servants, as well as innovations produced by NASA contractors. The technology commercialization program involves the following components: conducting a continuous inventory of newly-developed NASA technologies, maintaining an internet-based database of this inventory, assessing the commercial value of each technology, establishing R&D partnerships with industry for dual use of the technology, disseminating knowledge of these NASA technology opportunities to the private sector, and supporting an efficient system for licensing NASA technologies to private companies. Included in the amount requested for NASA commercialization efforts is $100M to carry out the provisions of the Small Business Innovation Research (SBIR) Act, which requires that 2.5 percent of NASA's total extramural R&D spending be set aside for small business research grants. An additional set-aside, involving 0.15 percent of NASA's total extramural R&D spending, applies to the Small Business Technology Transfer (STTR) Program. The NASA SBIR program has clearly contributed to the U.S. economy, fostering the establishment and growth of over 1,100 small, high technology businesses.

CONCLUSION

Mr. Chairman, I am enthusiastic and pleased with the budget I am presenting to the Committee. It gives us the stability to: continue vital safety investments in our Space Shuttles, start a Space Launch Initiative that will revolutionize our approach to meeting human space flight launch needs, continue construction of the ISS, and to do the cutting-edge research in science and technology that will make the missions of tomorrow a reality. While there will continue to be challenges with our ISS partnership, we will push forward and complete the ISS. We are on the brink of having a state-of-the-art laboratory in space that will provide unprecedented opportunities for long-term space research and provide the foundation for opening the space frontier in low-Earth orbit and beyond.

With a healthy launch industry, NASA would be able to focus its sights beyond Earth orbit. We will revolutionize our understanding of the universe and send rovers back to Mars while we look outward to Europa and try to uncover the mysteries locked beneath the icy surface of the Jovian moon that contains water and perhaps life. We will continue to develop the technology that will ultimately enable us to discover earth-size planets around other stars. We will continue to study our own planet Earth to try and understand the Earth system as a whole. We will push leapfrog technology which will not only make the missions we have not yet dreamed of a reality, but will also provide the technology push for continued economic prosperity and the exciting jobs of tomorrow.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION FISCAL YEAR 2001 ESTIMATES

[In millions of real year dollar]

	Fiscal years—		
	1999 OPLAN 12/23/99	2000 OPLAN REVISED	2001 PRES BUDGED
INTERNATIONAL SPACE STATION	2,299.7	2,323.1	2,114.5
SPACE FLIGHT OPERATIONS (SPACE SHUTTLE)	2,998.3	2,979.5	3,165.7
PAYLOAD & UTILIZATION OPS	182.0	165.1	.....
PAYLOAD & ELV SUPPORT	.....	.....	90.2
INVESTMENT & SUPPORT	.....	.....	129.5
HUMAN SPACE FLIGHT	5,480.0	5,467.7	5,499.9
SPACE SCIENCE	2,119.2	2,192.8	2,398.8
LIFE & MICROGRAVITY SCIENCES & APPS	263.5	274.7	302.4
EARTH SCIENCE	1,413.8	1,443.4	1,405.8
AERO-SPACE TECHNOLOGY	1,338.9	1,124.9	1,193.0
MISSION COMMUNICATIONS SERVICES	380.0	406.3	.....
SPACE OPERATIONS	.....	.....	529.4
ACADEMIC PROGRAMS	138.5	138.8	100.0
SCIENCE, AERONAUTICS & TECHNOLOGY	5,653.9	5,580.9	5,929.4
SAFETY, MSN ASSURANCE, ENGRING & ADV. CONCEPTS	35.6	43.0	47.5
SPACE COMMUNICATION SERVICES	185.8	89.7	.....
RESEACH & PROGRAM MANAGEMENT	2,109.6	2,217.6	2,290.6
CONSTRUCTION OF FACILITIES	168.5	181.9	245.9
MISSION SUPPORT	2,499.5	2,532.2	2,584.0
INSPECTOR GENERAL	19.6	20.0	22.0
TOTAL BUDGET AUTHORITY	13,653.0	13,600.8	14,035.3
TOTAL BUDGET OUTLAYS	13,663.0	13,446.0	13,675.0

Note: Fiscal year 2000 includes rescission and supplemental/transfer of $20.2M from HSF TO MS.

ASSEMBLY OF THE INTERNATIONAL SPACE STATION VIDEO

Senator BOND. Mr. Administrator, I think you have a show and tell here for us?

Mr. GOLDIN. Our staff talked to your staff, and we committed to show this film, which shows, in four and a half minutes, the assembly of the International Space Station.

Could we have the video?

Senator BOND. That's without objection.

Senator MIKULSKI. Whatever you say.

Senator BOND. We'd like to see it.

[Video shown.]

MULTIMEDIA PROJECTS

Senator BOND. Thank you very much, Mr. Goldin, and I guess we are ready to turn to the questions.

My first question is on the multimedia projects. I understand that NASA has been receiving proposals for the development of multimedia products and services with regard to the International

Space Station. I am very concerned that these proposals be judged according to objective criteria, on an even playing field, and we have heard some concerns from the community.

I understand there is not a formal RFP with a source evaluation board, so I'd like to know the status of this program, what criteria will be used in judging them, how the proposals will be selected, and if there is a procedure for handling disputes about the award of this contract, if one or some of the applicants are not happy with the result. How is this going to work?

Mr. GOLDIN. First, Mr. Chairman, let me say we're in new territory. We are not dealing with standard government contracts, be they cost-type or fixed-price contracts. What we are attempting to do is engage the private sector in providing high definition TV services, multimedia services, so the taxpayers don't have to make an investment and, in fact, have the potential for gaining money back from the profits that might occur.

Senator BOND. And I agree with that. I think that's a great approach. I'm excited about it.

Mr. GOLDIN. And saying that, there's a great deal of anxiety because we have a different contractual approach. I am not a source selection official, so as a result I am not in that process and I won't be briefed until a decision is made. We're right in the middle of the process.

I have talked to my people, and they have assured me that there are objective criteria for selection, there will be an opportunity for people to comment after the selection is made.

Senator BOND. I mean has there been a formal RFP, and do the people making the proposals know what the criteria are?

Mr. GOLDIN. There has been—Joe, could you come up, please? I would prefer that he do it because I have not been in the process.

Mr. ROTHENBERG. Yes, sir. In fact, it's not a formal RFP, but we put out a request or an invitation for industry to submit proposals relative to forming a cooperative agreement with us.

The RFP or the invitation is on the net, and visible on the web page, as is the evaluation criteria by which we will select the people to negotiate. It has all been on the web since the day we put it out.

The process is a formal process. In fact, we actually validated it as part of our ISO–9000 certification last year. The whole solicitation, so to speak—it's not a solicitation in the traditional sense—is being run very formally. There is evaluation criteria, it is on the net, and there is a team to evaluate it.

Senator BOND. How many proposals, how many different organizations are making proposals?

Mr. ROTHENBERG. Twelve.

Senator BOND. And what is your time frame for making the selection?

Mr. ROTHENBERG. We hope to be able to do it over the next month. However, again, it's charting new territory, and there are policy issues and things to resolve to make sure we are on firm ground when we do.

Senator BOND. Would you mind submitting to the committee a summary of the criteria? Is there something you can summarize.

Mr. ROTHENBERG. Certainly.

Senator BOND. We don't want a 500-page document, but——

Mr. ROTHENBERG. It's pretty straightforward. Certainly we will.

[The information follows:]

MCDONALD REPORT

ROTHENBERG SUMMARY OF TOP ISSUES

Workforce erosion threatens continued Shuttle safety—Hiring will address this concern, however the number of in-flight anomalies today are significantly less in magnitude and significance then those when the shuttle workforce was at its peak.

Shuttle is not an Operational Vehicle—its processing is highly dependent on touch labor and human actions. Touch labor and human actions are inherently weak links in the safety chain and should be reduced wherever possible—Safety and maintainability studies will attempt to identify and quantify upgrades which reduce opportunities for human error.

Formal Aging Program covering all subsystems needs to be put in place—New Shuttle Development Office as well as AMES support will address.

Risk management, maintainability and maintenance processes and tools need to be improved and take advantage of more modern tools including: a PRACA relational database front end; a more quantitative QRAS model; and processing support equipment such as non invasive wiring fault detection—Upgrade maintainability initiative, newly formed Shuttle Development Team and AMES Support will address.

Shuttle design incorporates a level of risk which needs to be re-examined to see if they can be eliminated or reduced including: redundant wire routing; numbers of joints in engine and hydraulic plumbing; routing of redundant hydraulic lines and APU technology—These will be systematically reviewed by the Shuttle Program Office and as appropriate included in the upgrade program.

Workforce stress—Broader survey by NASA at MSFC and by USA doesn't support all of the Human Factors findings.

ASAP recommendations not always followed and the need for ASAP turnover—Team did not have the benefit of all NASA responses to ASAP but we have not responded by agreeing fully to the prescribed approach for every ASAP recommendation such as the 98 and 99 skill shortage concerns.

RUSSIAN SERVICE MODULE

Senator BOND. Okay. All right. Thank you very much.

Mr. Administrator, let me turn to the question that Senator Mikulski raised about Russia. You know, Russia's participation has been a significant roadblock to meeting the scheduled development of hardware and assembly as well as scheduled launches for the ISS assembly.

In particular, the next scheduled element is the Russian-built service module, the element which was described here with living quarters and is part of the critical path. The element was scheduled for launch last year and has been rescheduled for launch by Russia later on I guess this year, on a Proton rocket, which also had problems.

The GAO in its report recently questioned the safety requirements of the Russian-made service module, and since it's a critical component in providing crew quarters and control functions, it identified, the GAO said the service module falls short of NASA's safety requirements—inadequate shielding, inability to operate after losing cabin pressure, excessive noise, lack of verification of design.

Can you tell us what the actual status of the service module is, and is the assembly complete in Russia? Has it been tested fully to ensure that it meets all requirements, both hardware and software.

Mr. GOLDIN. The service module testing is complete and they're going back and doing what's called regression testing, because there's additional time available. But sometime, by late this month, all testing will be complete, even the regression testing, and it will be put in a container awaiting readiness for launch.

The major problem we have had over the last year with the service module is not the module itself, but the failure of the Proton rocket. And I might say that America last year had trouble with its Delta and its Titan rockets, as did Europe with its Arian and Japan with it's H2 rockets. In that sense we are not concerned; and in fact our people have been over in Russia and have been briefed by the Russians on their fixes to the Proton rocket, and they believe they're on the right path. In fact, they commented that their testing was even more rigorous than the kind of testing we do.

That right now is our issue. We told the Russians we wanted them to launch a minimum of four flights, two with the existing Proton rockets and then two with the modifications. Two launches have already occurred of the existing configuration successful. There will be another launch this month, and in May and June there are two launches with the modified Proton rocket.

Presuming those launches are successful, we are on target for a launch between July 8 and July 14.

Now to comment with regard to the GAO, we have communicated with the GAO, we have gone through each of those issues, we have taken specific steps in working with the Russians, and we do not believe that there is a safety problem. We thank the GAO for pointing out these issues, and we have worked them through.

Senator BOND. Thank you very much, Mr. Administrator. Let me turn now to Senator Mikulski.

CHEMICAL AND BIOLOGICAL WARFARE

Senator MIKULSKI. Thank you, Mr. Chairman. I would like to just follow up on the Russian issue to really get your response.

Last year, allegations were raised that U.S. funds you designated for the space station were being diverted to a company called Biopreparat.

This company was allegedly involved in chemical and biological warfare. This is a persistent rumor that continues to appear, and I would like for you to tell me, one have you investigated this rumor and two what have been the outcomes of that investigation?

Mr. GOLDIN. Thank you, Senator Mikulski.

We sent a team to Russia, the Russians were very, very open with us. That team included the Chief Financial Officer from the Johnson Space Center, the administrative contracting officer, we had a representative from the I.G.'s office, and we had a number of other people.

I will submit for the record the formal report that they came back with and the protocol that they signed, but it says: "The NASA team saw no indication that the funds were used for other than the intended purposes."

And it goes into the process that they used for the investigation and their findings. In addition to which, on our own cognizance, the I.G. is taking a further step by talking to the scientists that have

been engaged in this program, and she will be coming out with a follow-up report in about a month.

Senator MIKULSKI. The I.G. will be coming out with a report?

Mr. GOLDIN. Yes.

Ms. GROSS. Not the scientists that were at Biopreparat, but scientists from America who attended Russian scientific presentations that we funded, and also those attended from U.S. presentations. We're also looking at the internal controls that were used to engage in this funding and how it interacted with the State Department.

Senator MIKULSKI. Thank you. Well, that sounds like you've done a pretty rigorous evaluation of this, and that steps will be taken in terms of controls.

Because we are very upset about this, and you know, we got the Russians involved in this space station so they wouldn't sell their technology to countries wanting to engage in weapons of mass destruction. They did go to Iran, their fingerprints are on other sales of technology. Part of that is the way the Russian government handled our money, and we won't go into that today, but biological and chemical warfare really is bone-chilling, so whatever we can do would be great.

EARTH SCIENCE BUDGET

Let's move on, though, to one of the other issues. As I understand it, the earth science budget is cut by $100 million over the next 5 years. It does not appear that NASA also has a mission for earth science after EOSDIS.

Tell me, why is earth science the only program that's being cut at NASA, and then also, what is the strategic plan for earth science beyond EOSDIS?

Mr. GOLDIN. The Administration felt that given we have had incredible success in getting the phase one of the Earth Observation System underway, we needed to take a pause before we thought about the investments we will make in the next phase, which begins about 3 years from now, 4 years from now. So they asked us to prepare a plan, an earth science implementation plan——

Senator MIKULSKI. This is OMB that asked you?

Mr. GOLDIN. Yes. And to coordinate with all the other agencies of government—the National Science Foundation, the U.S. Geological Survey, the Department of Defense, and come back to them in the 2002 budget with a very detailed, agreed-to peer-reviewed earth science plan.

The plan has come out, we've submitted it to the National Academy for review and our NASA oversight committees for review. We're engaging with the entire scientific community, and this plan will be part of the 2002 budget, and at that time I believe we will have a very significant outlook for the second phase of the Earth Observation System.

Senator MIKULSKI. Well, Doctor, I really need to be kept apprised of this, and I will tell you why. I understand the logic OMB presented to you, and "let's all take a pause." But you see, conveniently that comes out—and this is not about you in which you were directed to do—when we have a new administration, a new head of OMB—and quite frankly, I am afraid that earth science will get

stiff-armed in the transition, because we take pauses and breathers and so on.

So I can't have earth science literally fall between the transition cracks, and I would be very concerned about it. It would be my desire that even if the pause seems logical, that we know this year's appropriation what we are going to be talking about in 2002 so that we maintain the building blocks, and we're all aware that we do not want earth science to fall between the transition crack, or a new administration says "Since we took a pause one year, why don't we take a pause next year? And how about the pause after that?"

And I will tell you, from this Senator's perspective, it is not a pause that refreshes.

Mr. GOLDIN. Senator, I don't know that I could add to what you just said.

PEER REVIEWED ANALYSIS

Senator MIKULSKI. When do you think your peer—I see my time is up.

Senator BOND. That's all right. Take another shot. You've got him on the ropes.

Senator MIKULSKI. When do you think your peer reviewed analysis will be done?

Mr. GOLDIN. I think it will be done in late summer of this year, in time for the 2002 budget submittal, but before the Congress goes out of session.

Senator MIKULSKI. Do you think we could have this sooner rather than later, at least the preliminary picture so that we can have a sense of this as both the chairman and I work together, and we really are working with our House counterparts?

Mr. GOLDIN. I would be pleased to submit for the record a consolidated version of what I believe the direction is going to be and ought to be in response to this hearing, if that would be——

Senator MIKULSKI. Then we will accept it as NASA's view, been peer-reviewed, but at least it will give us a picture of the direction that NASA and its internal leadership, as well as yours, thinks it should go.

Mr. GOLDIN. I would be pleased to do that, and I believe that this is one of the most significant things NASA is doing. We are just trying to understand how the earth is changing and what are the consequences for life on earth. I can't think of a more important program. So I will personally prepare this document and submit it to this committee for the record in response to your question at this hearing.

Senator MIKULSKI. Thank you very much.

[The information follows:]

EXPLORING OUR HOME PLANET NASA'S EARTH SCIENCE ENTERPRISE IN THE NEW DECADE

EXECUTIVE SUMMARY

NASA's Earth Science Enterprise is charting the future course of its exploration of planet Earth from space. The roadmap of this exploration runs through the phases of characterizing, understanding and predicting changes and their effects in the Earth system. The Earth Observing System is providing that characterization, showing how the Earth's major components of land, atmosphere, oceans, ice and life

interact on a range of time scales. The coming decade will see our understanding of the forces acting on the Earth system, how it responds, what will be the consequences for life on Earth. This new understanding will result in a growing national predictive capability for climate, weather and natural hazards.

We know what are the science issues and questions that must be answered in the new decade. We have a maturing picture of what the observing and research architecture must be to answer these questions. We have identified the technology challenges that must be overcome to make this architecture both feasible and affordable. And we know that a variety of commercial, interagency and international partnerships will be required.

As the Earth Science Enterprise deploys the Earth Observing System, it is in parallel defining its Research Strategy and resultant observational requirements for the next decade. The Enterprise's Research Strategy is being reviewed by the National Academy of Sciences this Summer. Candidate mission concepts arising from the requirements and criteria in the Research Strategy will be identified in the fiscal year 2002 budget request. Those already identified are the NPOESS Preparatory Project and the Landsat continuity mission (perhaps a data purchase or other partnership). Stability in the outyear budget for Earth Science will assure technology development and related formulation activities can occur for post-2002 mission concepts as we complete deployment of the first series of EOS, complete development of the EOS Data and Information System, and conduct science and applications research based on the resulting data.

1. Earth Science is Science in the National Interest

If we could extend practical weather forecasts to 7 to 10 days, the benefits to utility companies, to building contractors, to just about everyone, would be enormous. How will we get there? The same way the Nation achieved the current 3–5 day forecasts—by adding NASA's satellite technology to NOAA's operational weather forecasting capability.

If we understood how and why climate is changing, we could take prudent steps—and avoid costly mis-steps—to lessen our impact on the climate system and our vulnerability to its changes. If we knew how much rainfall the Southeastern U.S. could expect to receive next season, farmers could make better decisions on planting drought resistant crops or more thirsty ones. How will we know? The same way we came to understand the extent and causes of ozone depletion, the mechanics of El Niño and La Niña, and the impacts of incoming solar energy on the Earth's atmosphere, oceans and land surface—by designing new space—based scientific instruments to measure key Earth system features, and by partnering with USDA, USGS, and other Federal agencies to get that information to those who need it at the state and local levels.

If we understood the true shape of the Earth's surface, and how the motions of the Earth's interior affected it, we could begin to predict volcanic eruptions and the impacts of earthquakes and floods. How will we find out? The same way we have begun to measure land surface shifts in the Los Angeles Basin, and to collect the data needed to build a three-dimensional model of nearly the entire inhabited portion of the Earth—by combining new satellite remote sensing techniques with ground-based instruments to measure the Earth's gravity field and surface strain. And by partnering with USGS and FEMA to apply these data to their maps of geologic faults and flood plains.

2. Scientific Challenges

NASA's Earth Science Enterprise aims to obtain a scientific understanding of the entire Earth system on a global scale by describing how its component parts and their interactions have evolved, how they function, and how they may be expected to continue to evolve on all time scales. The challenge is to develop the capability to predict those changes that will occur in the next decade to century, both naturally and in response to human activity. The strategic objective of the Enterprise is to provide scientific answers to the overarching question: How is the Earth changing and what are the consequences for life on Earth?

The view of Earth from space afforded by NASA's research satellites of the past four decades has led researchers to see the Earth as a complex and dynamic system. Its varied components of land, atmosphere, oceans, ice, and life are highly interactive. Incoming energy from the Sun and the motions of the Earth's interior drive these interactions. They constitute the natural forces acting on the Earth system. Especially in the last few millennia, and accelerating in recent centuries, human activities have constituted additional forces acting on the Earth system.

These forces illicit a wide variety of responses in the Earth system. These include large-scale changes in ecosystems over time (as, for example, when 'ice ages' expand

and recede, or when forested lands are converted to agricultural or residential use), or even, perhaps, the frequency of severe storms. The Earth's own natural variability makes it difficult to isolate natural from human-induced impacts. Further, many Earth system responses feed back on the system to become forcing factors themselves.

By examining the Earth as a system, as the view from space enables us to do, NASA aims to understand the forces, responses and feedbacks, and what they imply about natural and human-induced change. This conceptual approach applies in essence to all research areas of NASA's Earth science program, although it is particularly relevant to the problem of climate change, a major Earth science-related issue facing the countries of the world. The scientific strategy to address this immensely complex problem can be laid out in five steps or fundamental questions, each raising a wide range of cross-disciplinary science problems:

—How is the global Earth system changing?
—What are the primary causes of change in the Earth system?
—How does the Earth system respond to these natural and human-induced changes?
—What are the consequences of change in the Earth system for human civilization?
—How well can we predict future changes in the Earth system?

For each of these, a set of detailed, answerable questions have been posed, and what information is required to begin to answer them identified. Together with a set of decision How is the Earth changing and what are the consequences for life on Earth?

—How is the global Earth system changing?
  —Is the global cycle of water through the atmosphere accelerating?
  —How is the global ocean circulation varying on climatic time scales?
  —How are global ecosystems changing?
  —How is stratospheric ozone changing, as the abundance of ozone-depleting chemicals decreases?
  —Are polar ice sheets losing mass as a result of climate change?
  —What are the motions of the Earth and the Earth's interior, and what information can be inferred about Earth's internal processes?
—What are the primary forcings of the Earth system?
  —What trends in atmospheric constituents and solar radiation are driving global climate?
  —What are the changes in global land cover and land use, and what are their causes?
  —How is the Earth's surface being transformed and how can such information be used to predict future changes?
—How does the Earth system respond to natural and human-induced changes?
  —What are the effects of clouds and surface hydrologic processes on climate change?
  —How do ecosystems respond to environmental change and affect the global carbon cycle?
  —Will climate variations induce major changes in the deep ocean?
  —How do stratospheric trace constituents respond to climate change and chemical agents?
  —Will changes in polar ice sheets cause a major change in global sea level?
  —What are the effects of regional pollution on the global atmosphere, and the effects of global chemical and climate changes on regional air quality?
—What are the consequences of change in the Earth system for human civilization?
  —How are variations in local weather, precipitation and water resources related to global climate change?
  —What are the consequences of land cover and land use change?
  —To what extent are changes in coastal regions related to climate change and sea-level rise?
—How well can we predict the changes to the Earth system that will take place in the future?
  —To what extent can weather forecasting be improved by new global observations and advances in satellite data assimilation?
  —To what extent can transient climate variations be understood and predicted?
  —To what extent can long-term climate trends be assessed or predicted?
  —To what extent can future atmospheric chemical impacts be assessed?
  —To what extent can future atmospheric concentrations of carbon dioxide and methane be predicted? criteria (below), these comprise a Research Strategy

for the next decade. This Earth Science Enterprise Research Strategy is being reviewed by the National Academy of Sciences this Summer.

The Earth system science issues outlined above are remarkable for the number and diversity of topics, the complexity of the interactions, the multiplicity of spatial and time scales involved. A great number of scientific questions have been posed by the nation through NRC reports. Establishing research priorities becomes a major challenge when priorities cross a number of different disciplines. The challenge facing the ESE is to balance competing demands in the face of limited resources and to chart a program that addresses the most important and tractable scientific questions and allows optimal use of NASA's unique capabilities. The criteria for setting priorities among science questions and implementation approaches are shown here.

3. Progress Thus Far and Prospects for the Future

The Nation's investment in Earth Science at NASA has yielded some remarkable returns. NASA's ability to make global and regional-scale observations, to engage in basic research, and model Earth system components gives it a unique ability to formulate and answer scientifically important and policy relevant questions. Examples of achievements thus far include:

—Established the Earth's radiation budget (accounting for what happens to the solar energy that reaches the Earth) and its contribution to Earth's temperature and climate conditions;

—Created a global database of land cover as a baseline to track future change due to natural and human-induced forces;

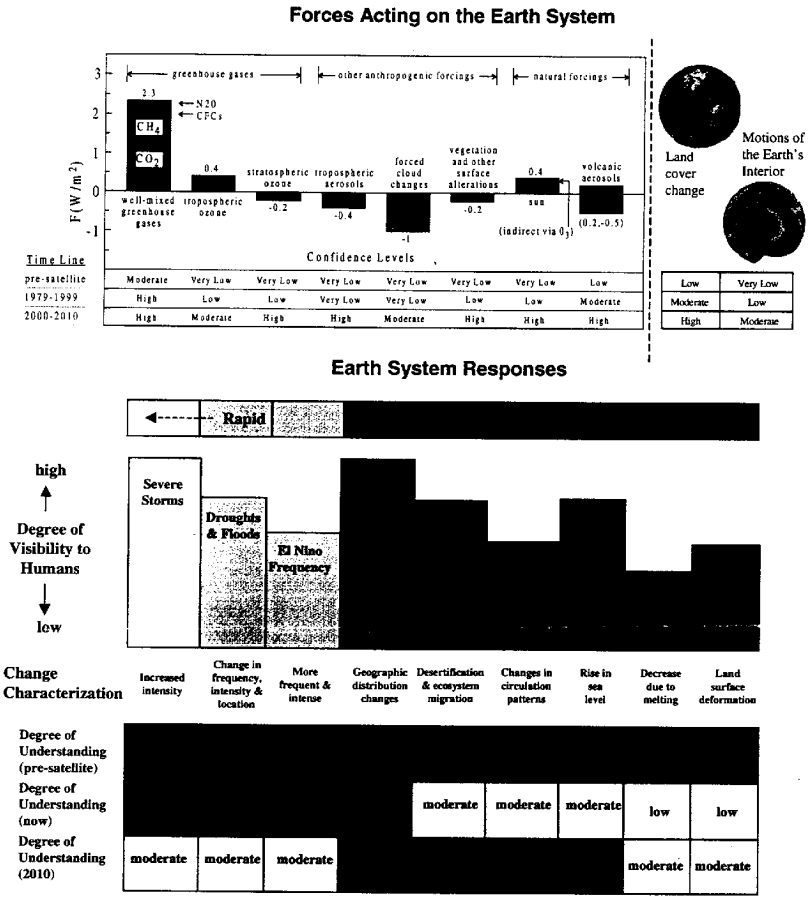
—Made the first direct measurements of global ocean circulation and wind speed and direction at the ocean surface, and discovered their role in short-term weather events such as hurricanes and other storms, and seasonal variations in climate such as El Niño/La Niña;

—Made the first measurements of the Earth's seasonal and annual biosphere fluctuations and their impact on food and fiber production;

—Established the global carbon budget (accounting for circulation of carbon among the land, oceans and atmosphere), quantifying the uncertainties in our knowledge of it, to support sound environmental policy decisions; and

—Monitored the seasonal and annual change in stratospheric ozone concentrations, and confirmed the sources and chemical processes of ozone destruction.

The following two tables document progress thus far in understanding the forces and responses of the Earth system. The first identifies the key forces acting on the Earth's climate and estimating their relative contributions to climate change. The second identifies principal response areas and their relative impact on our lives. For each, an assessment is made of how well we understood them before the era of Earth-observing satellites, how well we understand them now, and where we think we can be in 2010.



The implication of these two figures is that by 2010, if NASA is enabled to pursue its Research Strategy, NASA and its partners should achieve a solid, quantitative understanding of the known major forces acting on climate and the Earth system's responses to change.

Together, these two tables summarize our anticipated movement beyond characterization of the Earth system to understanding the forces, responses and feedbacks at work in the system. Requisite for this progress is a balanced program of observations, research and modeling enabled by advanced technology development for the next decade. The Earth Science Enterprise has already begun laying out this architecture.

4. Observing & Research Architecture

NASA's Earth Observing System, now being deployed, will enable scientists to study all the key interactions among the major components of the Earth system—the land, atmosphere, oceans, ice and life. It will help us understand how the Earth works. The first EOS missions, Landsat 7, QuikSCAT, Terra, and ACRIMsat, are already in orbit and providing valuable science data, which is being distributed through the EOS Data and Information System (EOSDIS). Through 2003, another 20 missions will round out the first phase of the Earth Observing System. Together, the EOS and related small satellites and Earth Probes such as QuikTOMS will allow researchers to observe these forcing and response factors in parallel to yield a synoptic view of the Earth system. Thus, EOS represents an historic increase in our ability to understand in unprecedented ways the planet on which we live.

Recent gains in science and technology enable the design of an Earth observing and research architecture for the next decade. Moving from characterization to understanding requires an integrated program of observations, information management, research and analysis, modeling, and knowledge dissemination and application. This framework for understanding then provides the groundwork for reliable Earth system prediction.

4.1 Observing Strategy

EOS will lay the scientific foundation for the future climate monitoring system—the joint NOAA, DOD National Polar-orbiting Operational Environmental Satellite System—that will also be the future satellite system for both civilian and military weather forecasting. And EOS will provide the broader context of Earth science for future missions to explore Earth system processes about which little is known.

These two additional contributions of EOS point to two of the three pillars of observing strategy for the next decade.

Systematic Measurements

The first pillar is continuity of selected long-term, or "systematic" measurements for which is believed that more than one decade of observation is required to understand natural variability and human influences on a key Earth system parameter. One example is atmospheric temperature and humidity, which is seen as a basic barometer of climate change. Another is land cover change, which both affects and is effected by regional climate change. Solar variability requires long term monitoring commensurate with its decadal variability so that internal and external forces on the Earth system can be quantified.

For each systematic measurement to be sustained, a plan for its continuity must be established. Some can be assumed by the NPOESS satellites. The key issues for NASA then are: (a) providing the means to bridge the time span between EOS and NPOESS; (b) developing the technology that will enable NPOESS to acquire reliable, low cost instruments; (c) assuring the algorithms and calibration procedures exist to enable science-quality data to be derived from the operational instruments; and (d) securing long-term maintenance of these observations. For those systematic measurements not (or not yet) planned for assumption by NPOESS, NASA must seek other appropriate operational agencies (domestic or foreign) to continue the measurements. NASA, after all, is a research and technology organization not well suited to carry on operational, long term monitoring tasks—our role is to advance the state of the art in science and technology, facilitate its adoption by essential service providers like NOAA and USGS, then move on to the next challenge.

In the 2003–2010 timeframe, some of the systematic measurement requirements will be met by the NPOESS Preparatory Project, a joint mission planned by NASA and the NPOESS Integrated Program Office for 2005. NPP will continue essential measurements from Terra and Aqua (including cloud and vegetation cover and temperature and humidity profiles) as well as demonstrate instrument technology for NPOESS. NASA and USGS are partnering to formulate the plan for continuity of the Landsat data set, perhaps through domestic and/or international collaboration. Other systematic measurement needs are being assessed as part of the review of the Research Strategy, including those for ocean and ice altimetry, global precipitation, and stratospheric chemistry.

The ideal observing system of the future will comprise multiple satellites operating in a coordinated fashion from multiple orbits (low Earth orbit, geostationary orbits, L1, L2). Small, smart satellite technologies and high rate on-board computing and communications will enable constellations of satellites that will provide high temporal resolution as well as robustness. Already, the Enterprise is taking its first steps in this constellation approach by "formation flying" its land imaging satellites Terra, Landsat and EO–1. We will do the same for the atmosphere with Aqua, Aura, PICASSO and Cloudsat. From its position at L1, Triana will view the full, Sun-lit disk of the Earth in some of the same channels as TOMS, adding the synoptic but frequent view as context for the local but infrequent one by TOMS. The next decade will provide new opportunities to advance the state of the art in multi-satellite science with such concepts as the Global Precipitation Mission, which will employ a main sciencecraft in tandem with existing and emerging operational weather satellites serving as drones to measure global precipitation distribution from pole to pole on a daily basis.

Exploratory Measurements

The second pillar is a set of exploratory missions that examine Earth system processes whose basic workings and impact on global change is largely unquantified. In some cases, they involve processes of known importance, but where the technology to measure them is only now becoming available at (an affordable cost). The Earth

System Science Pathfinder (ESSP) missions now in development are in this category. The Gravity Recovery And Climate Experiment (GRACE–2001) will make the first precise measurements of the Earth's geoid. These measurements will serve to improve the precision of ocean altimetry as well as add to our understanding of the Earth's interior. PICASSO–CENA and Cloudsat (2003) will use space-borne lasers to provide vertical profile measurements of aerosols and clouds, respectively, to help determine how they moderate the impact of solar energy reaching the atmosphere or reflected from the surface.

In the 2003–2010 timeframe, candidate exploratory missions include soil moisture measurement, ocean salinity, and land surface topography & deformation. Recent research has demonstrated that soil moisture is a key missing component in models of the global water cycle—and the availability of fresh water resources around the globe. Regionally, soil moisture influences evaporation, which in turn affects precipitation. Thus, accurate measurements of soil moisture on regional scales can improve forecasts of precipitation.

Exploratory measurement requirements are also being addressed in the review of the ESE Research Strategy. The Earth Science Enterprise will avoid creating a "queue" of such missions. Rather, the tactic of mixing strategically focused and highly innovative scientific experiments within exploratory mission solicitations will be pursued to allow a combination of strategy and opportunity (along with assessments of technology readiness) to influence mission concept selection.

Operational Pre-cursor and Technology Demonstrations

A third pillar comprises demonstration missions that prepare the way for new and lower cost capabilities to support our national Earth remote sensing strategic objectives. Operational pre-cursor missions are those which primarily serve interests outside the research community. NOAA, for example, sees measurement of tropospheric winds as yielding the next great improvement in weather forecasting. NASA has invested extensively during the past decade in development of solid state laser technologies that enable measurements of tropospheric wind speed commensurate with NOAA's needs. NASA and NOAA are discussing possible approaches (including commercial partnerships) to generate these data. NASA will only pursue such missions where it has the expertise and required technologies, and where there is a partner who will use their products, and who will co-sponsor development and execution of the mission.

We use technology demonstration missions to "flight test" new instrument and spacecraft technologies that enhance capabilities and/or lower the cost of measurements we need to make in the future. ESE will launch the New Millennium Program Earth Observer-1 (EO–1) mission to demonstrate a low cost means to meet the requirement for future Landsat-type data as well as to demonstrate the scientific and market value of hyperspectral imagery. ESE recently selected its next New Millennium mission to demonstrate the ability to make atmospheric sounding data from geostationary orbits that enable significant improvements (from 80 percent to 90 percent) in accuracy and extend the range of weather forecast from 3–5 days to 7–10 days.

4.2. Data and Information System Services

The Earth Observing System Data and Information System (EOSDIS) is functioning well and supporting the EOS missions launched to date. New EOSDIS releases are planned to support the balance of EOS missions to be launched through 2002. Over the past few years the National Academy of Sciences has been encouraging NASA to pursue an even more open and distributed architecture for data and information services. NASA is studying approaches to the data and information requirements of the future, with the goal of capitalizing on our investment in EOSDIS while embracing a broader range of modes of information product development and distribution. NASA will be presenting a concept for post-2002 data and information system services for review by the National Academy of Sciences later this year.

This emerging new concept is intended to meet the challenges posed by higher data volumes, increasing demand and variety of data products required by diverse users, and continued rapid advancement of computing and communications technology. It will feature collaboration among participants on standards and protocols, competition in selection of new and innovative components, and rigorous processes to ensure transition of important data records to long-term archives (principally at other agencies). Components of this new Data and Information System Services (NewDISS) concept include: Backbone Data Centers evolving from the current Distributed Active Archive Centers (DAACs); Mission Data Systems to produce basic data products from new missions for broad use; and Science/Multi-Mission Data Centers to produce innovative information products, often by combining data from

two or more missions. These are conceptual components; in reality, strategic alliances and competitive processes will likely result in cases where these functions are combined for some data product types. Such a concept will capitalize on an evolving EOSDIS infrastructure while adding new, flexible components to enable the "understanding" phase of Earth System Science. We envision that rapid developments in information system and telecommunications technologies will enable us to process and distribute geospatial information to users in near real-time.

4.3. Research & Analysis

The intellectual capital for both the planning and exploitation of Earth system observations is vested in a robust research and data analysis program. Research and analysis is the conceptual source of Earth system science questions, and of strategies to address them. The research program generates new scientific ideas and emerging research approaches, supports the early development of innovative observing techniques. In some cases, it generates new instruments and the linkage of instruments with platforms. This program develops processing algorithms, organizes field tests, and generally charts the path for scientific and engineering developments that enable future advances. It assures the linkage between global satellite observations, in situ process-oriented observations, and the computational models used to provide both a framework for interpretation of observations and a tool for prediction.

4.4. Earth System Modeling

Computer-based models are the principal means by which observations are translated into understanding in Earth science. Two key, related reasons account for this. First, as has been often described, the Earth is a dynamic system of interacting components. For example, it is the interaction of ocean temperatures and atmospheric winds and moisture that produce El Niño and La Niña. Atmosphere and land interactions, principally evaporation and precipitation, play a large role in regional weather. Models are the means by which these dynamic processes can be represented and studied. Second, because climate and other Earth system processes cannot be subjected to controlled experimentation, models are the only way in which predictions about changes in the future can be made. Weather forecasts are made based on models initialized with current weather conditions and mathematically-expressed climate system relationships. Questions about the affects of changing concentrations of trace gases on future climate can only be addressed via models.

A variety of models exist for specific Earth system processes, such as formation of cloud particles in atmospheric convection, and ozone destruction and replenishment. Earth system component models, such as for the whole atmosphere, have been constructed and are being improved, employing in some cases the results of process models. Further, component models are being coupled to represent the key interactions in the Earth system, including ocean-atmosphere and land-atmosphere interactions, in order to improve our understanding of the global water cycle, the global carbon cycle, and the various forcings, responses and feedback in the Earth system.

Accurate models are the key to the "understanding" phase of Earth system science. The modeling work now underway, and the observations from EOS and future satellites which drive them, should yield a quantitative understanding of Earth system change under present conditions and provide prediction of future changes. During the coming decade, the Enterprise will run fully interactive ecosystem-climate models to assess the impacts of climate change on land and marine productivity. We will assimilate wind data and precipitation data into climate and weather forecasting models to improve near-term and seasonal-to-interannual weather prediction.

These modeling efforts depend on a successful program of observation in the next decade to acquire data on such parameters as winds in the troposphere, global precipitation, soil moisture, and land surface change. Some are measurements that must continue from the EOS era (e.g., ocean surface winds, land cover change), while others will be new space-based measurements (e.g., soil moisture, tropospheric winds, land surface deformation).

We must also invest in development and utilization of supercomputers that support efficient execution of Earth system models that can predict future changes in the Earth on seasonal, annual, and inter-annual time scales.

4.6 Partnerships

The ESE research program is conducted within a larger national and international context. This implies both opportunities for task-sharing with partner agencies, and the responsibility to seek optimal coordination of mutually supportive programs of these national and international partners. Domestically, both commer-

cial and inter-agency partnerships are essential to the long-term success of the Enterprise.

The U.S. commercial remote sensing industry comprises both providers of satellite data and producers of value-added information products. Some companies are involved in both. The first wholly commercial remote sensing satellite was launched in 1999, and several more are planned over the next few years. Thus it is increasingly likely that some Enterprise science data needs will be met by commercial providers, and Enterprise mission solicitations will offer these opportunities. "Value-added" companies are being engaged in our applications demonstration partnerships with state and local governments and universities, with the intent that new, direct industry to user commercial relationships will result. While NASA has been instrumental in the birth and growth of the commercial remote sensing industry, it has evolved to the point where NASA has limited ability to influence their investment decisions. This is a good thing, but implies a change of relationship to a more equal partner status. Conversely, the growing industry has a limited ability to invest in high risk development; this will continue to be the area of NASA's contribution, along with scientific research.

The Enterprise has been actively seeking the cooperation of operational agencies (principally NOAA and USGS) to ensure the long-term continuity of key environmental measurements in the long term. To achieve this goal, NASA will promote the convergence of the operational observation requirements of partner agencies with ESE research data needs for systematic observations, share the cost of new developments, and develop precursor instruments and spacecraft technologies for future operational application missions. NASA will also encourage the continuing involvement of scientific investigators in the calibration and validation of operational measurements, the development of more advanced information retrieval algorithms, and the analysis of operational data records. From this perspective, the potential for serving operational needs or commercial applications is a priority criterion for ESE programs, since such applications imply the potential for cooperation with relevant government agencies or data purchase from commercial sources.

Internationally, partnerships will continue to be essential for global change research. In the EOS era, $4 billion worth of activity were invested by foreign governments directly in EOS missions, and $4.7 billion more was leveraged by the Enterprise through data sharing arrangements. Both traditional partners Europe, Japan and Canada and newly emerging ones like Brazil and Argentina are being engaged in discussions of an integrated global observing strategy for the future. In addition to the cost savings resulting from such partnerships, it has become apparent that foreign governments are more willing to accept the findings of research when their researchers and space programs are engaged.

The Earth Science Enterprise will pursue all three types of partners as we design the observing and research architecture for the next decade. The likelihood of success in leveraging resources invested by partners is greatly enhanced when the U.S. exhibits budget stability in the planning and implementation of satellite programs.

4.7 Getting Scientific Results to Users

Earth Science is science in the national interest. That is, it produces information with uses far beyond the scientific community—in weather forecasting, in agriculture and natural resource management, in urban and regional planning, and in environmental policy-making. Beyond research, then, the Enterprise must work with its partners to assure that timely, useable information products are available to a broad range of decision-makers. Several avenues exist and must be strengthened over the next decade to accomplish this.

The first is NASA's partnerships with operational agencies—those agencies like NOAA, FEMA, USDA and USGS that provide services on a routine basis to the public. NASA already develops the weather satellites operated by NOAA for weather forecasting. In the next decade, NASA will help NOAA and the DOD to develop a new generation of weather satellites. A prototype satellite is planned for mid-decade that will meet NOAA's technology demonstration and risk mitigation needs as well as provide climate data to extend that begun by the first series of EOS. Joint research projects are underway with FEMA, USDA, and others to apply remote sensing data to their concerns (e.g., flood and drought preparedness). The next decade will see these agencies routinely applying remote sensing data to improve the services they provide to the public.

The second are scientific assessments of environmental change. The nature of the scientific enterprise is that initial results will be reported through the peer-reviewed scientific literature and presented at scientific meetings. The sheer volume of scientific findings and, in many cases, the diversity of ideas, imply that a synthesis effort is needed to communicate the information usefully outside the scientific com-

munity. The assessment process, in which groups of scientists work to synthesize their knowledge in a particular area, is perhaps the best established means to make the connection between research results and the answers sought by the sponsors of research and by policy decision-makers. In such assessments, the scientific community comes together to answer not only questions such as "What do we know?" but also, and perhaps equally importantly, "How well do we know what we think we know?" These take place on both the national and international levels, through such organizations as the World Meteorological Organization and the US Global Change Research Program. Assessments in the next decade will include progress in the recovery of the stratospheric ozone layer, the health of the world's ecosystems supporting the global economy by providing goods and services, and impacts of climate change on various sectors of the economy. NASA is a provider of objective scientific information to these assessments.

The third are partnerships with state and local governments to demonstrate new applications of geospatial data to regional concerns. These partnerships will often include commercial data product producers, who will independently generate these products once the viability of the techniques and market are demonstrated. The Enterprise currently has several mechanisms with which to form such partnership. The next decade will see this effort mature from an ad hoc set of actions to a coordinated program that is national in scope, characterized by competition, merit review, and "demand-pull" from state and local users.

One key to achieving broad and efficient production and distribution of information products is computing and communications technology. The Enterprise is sponsoring a number of new research projects in this area. Of equal importance to more powerful computing hardware are the software tools and protocols to combine diverse data sets into readily useable forms. NASA, other agencies, and the private sector are pursing a "Digital Earth" concept for the next decade that will focus on means to combine diverse data types into a broadly accessible, intelligent architecture that can be queried by users with specific, unforeseeable interests.

5.0 Anticipated Outcomes for the Nation: A Predictive Capability

The observing and research architecture outlined in this section builds on the nation's investment in the Earth Observing System. It extends and improves upon selected EOS measurements for which longer term data records are required to answer key climate change questions. It adds some new measurements where recent research uncovers a need and technological advancement makes them feasible and affordable. And it focuses on the integration of observations, research and models made possible by EOS in order to reveal the forces, responses and feedbacks driving the directions of Earth system change—to provide answers to the science questions posed earlier. It is a flexible architecture that will allow for inclusion of advances in science and technology. It will yield a quantitative understanding of the Earth system, with such products as:

—7–10 day weather forecasts;
—Seasonal prediction of precipitation;
—Quantification of the major forces and responses in the climate system, and seasonal climate forecasts; and
—Quantified trends in terrestrial and marine ecosystem productivity, and impacts on production of goods and services.

Beyond this, it lays the groundwork for a predictive capability. Visionary Earth scientists foresee the coming constellations of coordinated satellites evolving toward a "sensorweb" of intelligent satellites in a variety of orbits keeping watch over the Earth. This sensorweb will employ the understanding gained in the next decade and demonstrate for our service—providing partners the capability to produce:

—10–14 day weather forecasts;
—12 month rain rate estimates;
—10 year climate forecasts;
—10 day forecasts of pollution alerts;
—5 day volcanic eruption prediction & routine forecast of ash cloud trajectories for civil aviation; and
—15–20 month El Niño forecasts.

Such forecasts will greatly enhance national and local efforts to protect the health and safety of both people and high-value physical assets. The nation's investment in Earth science over the next decade will continue to yield substantial, tangible returns in the years and decades to come.

6. Implications for NASA Earth Science Enterprise Budget

The ten and twenty year anticipated outcomes defined above are scientifically and technologically achievable. However, the nation is currently under-investing in

Earth science if these are our goals. Essential elements requiring funding to implement this vision of Earth Science are:

(1) Securing data continuity for important systematic measurements. As indicated above, the Enterprise is looking to NPOESS to assume responsibility to provide some key systematic measurements. In turn, a subset of these will be continued from EOS by the NPOESS Preparatory Project. But other important measurements (e.g., ocean and ice altimetry, stratospheric and tropospheric chemistry, land surface deformation) remain to be addressed.

(2) Upfront investment in advanced technologies. Examples include:

—the ability to migrate selected sensors from low Earth orbit to geostationary and higher orbits to achieve greater temporal coverage commensurate with the dynamic nature of atmospheric and surface processes;

—nanosatellite technology to enable intelligent constellations of inexpensive sensorcraft to form a system that is both adaptive to new scientific understanding and robust enough to demonstrate the reliability required by operational users.

—computing and communications advances that will allow near-real time processing, combination, and visualization of data sets, and modeling of weather and climate systems.

(3) Demonstration of means to serve the broader, non-scientific community. Currently, the Enterprise is running a number of small pilot projects to demonstrate the applicability of remote sensing to practical problems. But in order to make the use of Earth science data and results ubiquitous in society—to see it make a substantial impact on economic growth and environmental quality—means must be developed to make geospatial data both accessible and meaningful to the broadest range of users.

In the upcoming fiscal year 2002 budget process we will be considering the appropriate level of funding that is needed to conduct the research observations and technology development that will fulfill the goals of the ESE Research Strategy.

CONCLUSION

The next decade promises to be an exciting one for the nation in Earth Science. We will move beyond characterizing the Earth system to genuinely understanding how it works, so that we can begin to predict future change. New scientific knowledge and practical applications will be streaming from EOS and Earth probes missions. Advanced technology, lower cost missions will be developed to assure the continuity of essential science data. Small, innovative missions will discover facets of the Earth system that we can only guess at today. An information management system that will ensure affordable and timely delivery and access to data products by scientists, practitioners and policymakers. New ways of combining geospatial data into innovative, useful information products will engage a broader range of users to multiply the return on the national investment in Earth science. And the result will be a robust climate, weather, and natural hazard prediction capability for the nation.

[CLERK'S NOTE: For further information about NASA's DRAFT Earth Science Enterprise Research Plan 2000–2010 visit there web site at http://www.earth.nasa.gov/visions/index.html]

RUSSIA'S OBLIGATIONS AS AN ISS PARTNER

Senator BOND. Thank you, Senator Mikulski.

Staying on the ISS questions, I remain tremendously concerned about Russia's ability or possible lack of commitment to meet its obligations as a partner in the ISS. I am concerned about the additional cost, and duplication that will hit us.

What are the key pieces of hardware and software for which Russia is responsible and are essential to complete the assembly of the ISS? What is NASA's policy for addressing the risk of Russian failure to meet its obligations, what would our associated costs be, can we complete the ISS without Russia, what steps would NASA have to take under what timeline, are there any sanctions in the state-to-state agreement? I'd like to know, and really how much money we have had to spend, to backfill or meet existing Russian obligations.

I know this is a broad question, but this is a major concern. So I'd like to have you address that whole question.

Mr. GOLDIN. I will try and remember each element, but——

Senator BOND. Well, let's start off from the back. How much have we spent to date on backfilling on Russian failure to meet obligations?

Mr. GOLDIN. We have felt it was necessary to make the space station more robust, and early on we decided to build a crew return vehicle. Initially we were going to rely on the Soyuz as a crew return vehicle, but we did this for another reason: The Aerospace Safety Advisory Panel felt that they would like us to have a crew return vehicle so that all crew members could get into this vehicle at one time——

Senator BOND. It was seven rather than three.

Mr. GOLDIN. Than three. That program is on the order of about 800 to 900—no, no, it's on the order of $1 billion.

We made a decision about a year or two ago that to make the station more robust in the event that the Russians could not meet their propulsive function, which is the most critical function they have to perform, that we would build a propulsion module. That propulsion module is presently estimated at over a half a billion dollars. I would say that that is a very specific step we took to make that station more robust.

Senator BOND. What are the key pieces for which Russia is responsible in addition to those, and what are your back-up plans if Russia fails to meet its obligations?

Mr. GOLDIN. The most critical element that we need is a service module on orbit. Once that service module is up there, we will have the very key link, and from that point on, we will be in a much better position.

There are a number of other things, small elements the Russians have to deliver. The other critical element that the Russians have to deliver are Soyuz vehicles, two per year; and Progress vehicles, this year three, next year about three, and after that I think three to six per year. Those are the core things that we are expecting of the Russians and want them to take care of. Now in the event that they have a problem on launch with the service module, because we believe it is ready to go, we have built——

Senator BOND. Have you all looked at the service module? You are convinced that that's okay, meets standards and——

Mr. GOLDIN. Our people have been in the factory as it has been built, and right now we believe, as I indicated earlier, the key path element is the Proton vehicle. If we have two successful Proton launches with the modifications, we're ready to go.

In the event that there's a problem on the launch with that Proton, we have built at the Naval Research Lab what's called an interim control module, which we could launch up to the space station in its present configuration and keep it up in the sky with a propulsive capability.

If the Russians do not perform with the service module, we then could have a very significant delay to the program, but we have the backup in keeping it up there safely with the interim control module.

IRAN NONPROLIFERATION ACT

Senator BOND. One related question, and this again was raised by Senator Mikulski. We are all familiar with the Iran Nonproliferation Act, which requires the President to certify Russia is not assisting Iran with ballistic missile technology or other weapons of mass destruction. But without the Presidential certification, NASA is prohibited from sending funding to Russia except under certain circumstances.

What's the potential impact of the nonproliferation act on NASA and Russia's ability to work together, and if the President were not able to certify Russia was free of Iran Nonproliferation Act violations, what impact would that have on the space station, and what would NASA have to do?

Mr. GOLDIN. First, let me start off by saying we are going to live with the letter of the law of the Iran Nonproliferation Act, and at the present time, under the auspices of the Act, we are in the process of seeking to buy $14 million worth of equipment that will enable us to hook up this interim control module and the propulsion module to the space station. We anticipate, under the Act we will be able to make this $14 million purchase, and it was called out in the Act itself. There is $21 million more of purchases we would like to make which pertain to the safety of our astronauts and the safety of the space station, and we anticipate those purchases being made at some point later this year.

Beyond that, if the Russians do what they say they're going to do, their president just said he is going to provide the proper finances for the space station—everything ought to flow. If the Russians do not perform, then we will be facing a decision, do we want to buy some further elements for the space station to keep it up there, until we bring all our other equipment from the United States? I am not yet ready to say we are going to spend a nickel beyond the $35 million I have just defined until we better understand the situation.

Senator BOND. That's their performance. When would the Nonproliferation Act—would that potentially impact any of those purchases?

Mr. GOLDIN. It could, beyond that $35 million I have just defined, and it may prevent us from buying some goods and equipment that could help keep the Russians going in the event they don't get the proper funding from their government. That would be smart for us to do because it would avoid spending billions of dollars on our side to make up for that deficiency. And at the present time we feel we're okay, but it could lead to a problem later this year.

Senator BOND. Thank you.

Senator Mikulski.

LIVING WITH A STAR

Senator MIKULSKI. Well, I share the chairman's concerns and how we really need to stand sentry on this. I won't pursue an additional line of questioning, but I am going to be associated with his line of questioning about the space station.

I would like to come back to space science again. In your budget presentation, you're talking about a new initiative called Living With A Star. And as I understand it, it would be a multimillion dollar project over 10 years.

Could you, because this will be a new initiative and I think we are being very careful about new initiatives, could you tell me what is the goal of Living With A Star and what do you think will be the benefits of the program and why should we embark upon it?

Mr. GOLDIN. It is a very important program. It will help us understand how and why does the sun vary, and how does the earth respond to these variations.

I might give you a point of reference: A tenth percent change in the energy from the sun reaching the earth has a significant impact on our climate, and has had over the years. So these are very important small numbers we're looking at. We believe that this is going to impact us in four ways. And if you asked me this question 200 years ago, I would say "Well, it could impact the climate, but we have no control, so we'll just keep on chugging along." But with high tech, it is the interaction of the radiation coming from the sun that could shut down our high tech.

So the first area is the national economy. It could damage communication and weather satellites, and we've seen pagers shut down just a few years ago, and the whole country ground to a halt. It disrupts the electrical power grid. It could disrupt GPS navigation signals which are crucial to airline safety in almost everything we do. High frequency radio communications, and it could damage electronics and people flying at very high altitudes in planes.

The second area we are concerned about and are working with the Department of Defense is national defense. Space weather could impact guidance and navigation of precision weapons, disrupt space operations, interrupt communications, affect long range radar, and impede navigation, all crucial to the national defense, and we don't have the kind of space weather forecasting that's necessary for that.

The third area is understanding the variations in the sun and how it impacts global change here on earth. One of the key missions for NASA is to understand the forces on our climate. Some are natural like the variability from the sun, others are human-induced. Understanding what the sun does and understanding what people do and separating out the two allows us to have real mitigation strategies.

And finally, for NASA, human exploration. One of the biggest challenges that we will have in sending astronauts to Mars is in protecting them from the dangers and rigors of space radiation and, in fact, this will be the subject of the announcement we'll be making with the National Cancer Institute later today.

We only have a 1 hour warning on solar storms. In the limit, if we are successful in this program, we could get warnings of up to 2 weeks, and with a high tech economy, if you know what's coming, you could mitigate it and not have the devastating effect that it might have. So I would say of the things that NASA is doing, this touches every American, it touches every person on this planet, it touches our economy, it touches the national defense, it touches our climate, it touches everything and our vision for going to Mars.

Senator MIKULSKI. So your basic position is Living With A Star will be a very important set of scientific activity that will then have great impact here.

TECHNOLOGY TRANSFER

Well, as you know, one of the things I continually advocate is what I call tech-transfer, growth of knowledge. Today I know you will be signing again another bilateral agreement with NIH, and I recall when Dr. Bernadine Healy was head of NIH, in the Bush Administration, and you were the NASA administrator, encouraged you two to get together, that if we could have treaties around the world, that you two could have a bilateral agreement on the space science as well as the wonderful work at NIH.

Could you tell us today what we are going to be signing, and could you describe any of the protocols that have come out of this agreement between NASA and NIH?

Mr. GOLDIN. I might say that if we had a treaty, you were the chief negotiator, and that it has been unbelievably successful. We have signed 22 agreements with the National Institutes of Health in aging, in pulmonary disease, in heart disease, in balance problems, in cancer research. We now have transferred our bio-reactive technology to the National Institutes of Health to build tissues in three dimensions so they could do cancer research outside the body and have high quality tissue to work on.

Today we are going to take the next step, with the National Cancer Institute, and using very advanced NASA technology, in nanotechnology, biotechnology and information technology. We're in the limit, we will build things an atom at a time and be able to perhaps even do self-replication. We hope to be able to work with the bio-informatics knowledge at the National Cancer Institute to be able to build what's called micromolecular sensors, where we can sense inside the body at the sub-cellular level, and search out disease before it really spreads.

For example, a cell could mutate, and until it becomes an impact on your body could be 10, 20 years and you wouldn't even know it. So we're going to work on these micromolecular sensors, and we hope to build nano-explorers, nano-diagnostics, and nano-therapists to in the limit help our astronauts deal with the radiation that they'll have to come in contact with in going to Mars, and help on earth begin to get some real advanced sensing devices to help people understand when disease gets into their body much earlier.

Senator MIKULSKI. I think that this is very, very exciting, and I don't want to prolong my questions, but as I understand it, and I know I'm going to sound like science fiction news here.

But these biosensors are really very small nanosensors that truly an astronaut in space, and if we perfect it between NASA and NIH could then move into our own civilian clinical practice. But you truly could consume, through a pill, an inhalant, so on, a device that then breaks up and you'd have these mini-micro, nano——

Mr. GOLDIN. It's a thousandth the size of a micro.

Senator MIKULSKI. That can go through your body, essentially sensing—like literally an MRI, zipping through your body—and that down here at Planet Earth, we could then get a picture of what was happening with our astronaut. Am I correct in that?

Mr. GOLDIN. It may even be better than that. These devices could have intelligence and communications capability, and in the limit communicate with an onboard computer and then provide real-time therapy without ever having to communicate back with earth. In the limit that's what we would like to be able to do.

Senator MIKULSKI. Isn't that——

Senator BOND. Awesome.

Senator MIKULSKI. Yes. Yes.

Well, Dr. Goldin, I know that Senator Shelby is here—I think that this nanotechnology, both through the Science Foundation, NASA and so on, could offer one of the most important breakthroughs that our nation could offer. And I hope to talk with the chairman about really how we can, in a very steady, progressive way, move forth in the development and exploration of nanotechnology. Because I truly think that this will—what miniaturization meant two or three decades ago, that this will be so leapfrogging us into the future and would like to discuss this with you.

Mr. Chairman, that will conclude my questions. But again, Dr. Goldin, I'd like to thank you for all that you've done. We will be talking a lot over the next several months as we work on our appropriations.

But again, both to you and to your team, I would like to express my thanks to your wife, because we've met on a number of occasions—but the same with FEMA and James Lee Witt and the people out there with spouses. Often we are in crisis management situations and so on, long hours, financial sacrifices.

So I want to express my appreciation to her, and I really mean it for all in the room who—you know, behind every great person is a spouse that adds spice and support.

Senator BOND. Either that or a surprise mother-in-law. Well, thank you, Senator Mikulski. I just hope we don't let any of the protest groups know about this potential breakthrough, because we don't want to have to fight them in the street as well.

We now are delighted to welcome Senator Shelby, a valued member of the committee, and ask him to pose his questions.

Senator SHELBY. Thank you, Mr. Chairman.

Mr. Chairman, to you and Dr. Goldin, I am sorry I missed some of the hearing, I had another commitment in another committee, like everybody, but this is a very important one.

Dr. Goldin, I want to associate myself with the remarks of the Senator from Maryland. I have had the privilege of meeting your wife, and she is dynamic in her own way and that helps you in many ways, but so are you. You have brought a lot of leadership to NASA at a crucial time. You come from a technical background which is very, very important in the job that you do. And I think oftentimes it's nice for all of us to appreciate the obvious, and I think that's obvious.

ENABLING CUTTING-EDGE TECHNOLOGY

Having said that, given the budget constraints which we've been through, and you've really been through on the front line, over the last 7 years do you think that NASA has been able to sufficiently invest in space propulsion research facilities an equivalent? In other words, to enable cutting-edge technology breakthroughs, be-

cause that's a big future, is propulsion. Where do we go, how do we save money, and so on? I've sat and talked with you about this before. I know we've had some money, but is it sufficient, really?

Mr. GOLDIN. Up until this year's budget it has been very thin, and if you can indulge me for a moment, Senator——

Senator SHELBY. Absolutely.

Mr. GOLDIN [continuing]. Shelby, I have a chart up here, and I'll ask the NASA comptroller to go to the chart. I believe you have a copy in front of you.

Senator SHELBY. I can see that, as long as it's way off.

Mr. GOLDIN. This chart is testimony to the incredible work force at NASA and their belief in what the American people want. On that chart you will see four lines. The bottom line is labeled NASA, and we've normalized the budget to fiscal year 1993.

Relative to our budget in 1993, over these last 7 years the NASA budget has come down 5 percent. If you take a look at Defense, it has had its share of problems, but it has gone up 5 percent. If you take a look at all the other discretionary agencies, they are up about 17 percent.

This NASA team really wanted to do more with less, which is what the American people asked for. And this is the first time in 7 years that I am sitting before this committee saying we need more money. We have made a modest increase of about 3.2 percent, which will get at the issue that you're talking about.

We are being very frugal in what we do, and in fact we found we cut too hard, and I personally accepted the responsibility for pushing because I didn't know where the boundary was. But I felt it was essential to gain the confidence of the American people that we do the right thing. Having had some failures, we pushed too hard, and that is why in this year's budget we put a significant increase into propulsion; because without propulsion, you don't get to where you want to go in the solar system and universe.

Senator SHELBY. Propulsion is very important and central to the future of NASA, is it not?

Mr. GOLDIN. Yes.

NEXT GENERATION REUSABLE LAUNCH VEHICLE

Senator SHELBY. Dr. Goldin, I also understand that the core activity, the Space Launch Initiative, includes competition in the private sector, to result in a decision around 2005 or something like that, about your next generation reusable launch vehicle.

Who will be encouraged to compete, and how many competitors do you plan to fund?

Mr. GOLDIN. Well, we intend to encourage not just the big companies, but the small companies. I personally had dinner with the CEOs of eight or nine of these small companies in anticipation of the budget. We even have a special competition set aside for alternate access to the space station, and we're looking for innovation approaches. Innovation could come from small companies or big companies.

Senator SHELBY. Oftentimes it does, doesn't it?

Mr. GOLDIN. Yes. And we intend to down-select to perhaps, in the first round to four to six companies in this alternate access to the space station. So we want to be as inclusive as possible and go

as far as our funds could take us, but it is essential to have competition.

Senator SHELBY. Are you building on what we have today? You know, NASA has already made progress in the current reusable launch vehicle programs, the X–33 and X–34. Will you be building on that, or will you be looking at everything?

Mr. GOLDIN. We're going to be building on that, but we're hoping for other proposals. You know on the X–33, it is the first time in 25 years NASA has a radical new engine that's being tested in Stennis, Mississippi. We're hoping for innovation.

In fact in yesterday's trade, the Aerospace Daily, it talked about the fact that we're working on a rocket-based combined cycle engine which breathes oxygen in addition to carrying its own fuel. So we're going to push the limits on everything.

SPACE LINER 100 PROGRAM

Senator SHELBY. Dr. Goldin, can you give me an update on the Space Liner 100? Last year we added $80 million for that. What's going on there?

Mr. GOLDIN. First I'd like to thank you and Senator Lott and a number of the other members who helped work with us to get Space Liner 100 going. And in this year's budget, I believe we have what we call third generation reusable launch vehicles, which is in essence a continuation of Space Liner 100. I believe we have about $400 million in the budget, and when you include synergy with some of the aeronautics activities, it's even more money.

So we are continuing, and this is really pushing the limit, like with a MagLev launcher—they built a 50 foot track down there in Huntsville, Alabama. We think you could save 25 percent of the energy if you could accelerate the vehicle up to 100 miles an hour using electricity on the ground so it makes a simpler, smaller vehicle. We are looking at building a test track as long as one mile.

Senator SHELBY. That's good.

Mr. Chairman, thank you. And Dr. Goldin, thank you for your courtesy.

EXPORT CONTROL PROGRAM

Senator BOND. Thank you very much, Senator Shelby.

Following up on the question on Iran proliferation, the I.G. audit of March 23 raised some concerns about potential export violations by two or three NASA contractors, exporting NASA-funded control technology. This, from Goddard, Johnson, and the Marshall Space Flight Center, the responsible managing program personnel were unable to identify NASA-funded control technologies that contractors export.

Without the proper knowledge and control, do we lack assurance that contractor export activities are in accordance with the applicable laws and regulations? What corrective action has NASA taken to ensure that these violations do not reoccur?

Mr. GOLDIN. First let me say at the highest levels of the Agency I consider myself the chief security officer for this Agency, I don't delegate it to anyone else. I have gone to and asked for help from the director of the CIA and the director of the FBI. I did this some half year to a year ago because I did not want NASA to have any

problems. And I said "Send in your people, openly audit us, tell us where the problems are" and we are getting ready for a briefing on that subject now.

I have relied very heavily on John Schumacher who supports the security function for me, but I want you to understand I am in charge of security. We have done unbelievable things in training of our people doing the right things. Occasionally some people make some mistakes, and I thank the I.G. for doing her studies. We view the I.G. as a friend of the Agency because she looks for where problems are.

Senator BOND. That's two unusual things.

Mr. GOLDIN. I don't know the details of that problem——

Senator BOND. Relying on the I.G. is not something we find often in this committee.

Senator SHELBY. That's unusual, Mr. Chairman.

Senator BOND. Nor do we find somebody who takes responsibility when things—you stick out like a sore thumb, and we appreciate it.

Mr. GOLDIN. We are dealing with public money and the public needs to have confidence in us. And the I.G. is independent. We don't always agree, but the fact of the matter is, I value the fact that she goes out and searches where problems are. I'd rather hear it from the NASA I.G. than read it in The Washington Post.

Let me ask John Shumacher to address that specific question.

Mr. SHUMACHER. Thank you, Mr. Goldin.

Real quickly, on export control. First, NASA, since 1994 has had a comprehensive export control program, that is for NASA and all our centers. We just had our annual export control conference where, as Mr. Goldin has said, we bring in other agencies to learn best practices and enforcement agencies like FBI and others to also tell us about threats and what they see, and that is to enhance the capability of NASA and NASA working with its contractors.

Now with contractors in particular, they are directly responsible by law to adhere to the export control laws of the United States. We are glad to use our export control program as a resource to help them if they have questions and that type of thing, but there is direct accountability when a contractor is making exports pursuant to a contract that they are executing. If they are executing through NASA, a NASA agreement or such, then we have some work with them on that, but we try and make sure the lines are very clear about what is a contractor responsibility and what are NASA responsibilities.

Also, as Mr. Goldin has indicated, the I.G. has looked at both NASA's export control program as well as contractor execution of their export control responsibilities, and their report recently came out. Any violation obviously we take very seriously and we want to understand what corrective actions are being taken by the contractor.

SPACE TRANSPORTATION VEHICLE

Senator BOND. Let me ask one more. We've talked about the lifeboats and the Soyuz and the CRV that you are developing, the crew return vehicle, seven persons useful life of three years. I un-

derstand that NASA is looking to use the X–38 as a test vehicle and may spend $1 billion in its development.

This CRV, at a cost of $1 billion, appears somewhat limited. Why not look to use this requirement to fund the development of the reusable launch vehicle or at least a more sophisticated space transportation vehicle that both could serve as an emergency vehicle and a supply vehicle?

Mr. GOLDIN. Well, Mr. Chairman, we are looking at that as part of this integrated space launch initiative. Over the next few years, while we're testing the X–38, we're going to work with industry and see if it's possible to integrate a crew return function, which is only one activity, with a crew transport function, which is taking the crew up, and seeing if on the margin we could add to this billion dollars with a reasonable amount of money so that we could have alternate access a lot sooner. We are openly soliciting proposals from the industry to work with us, but we are going to continue to get this X–38 ready so that we could go build it should we have a need for it.

Now the other reason is, the Aerospace Advisory Panel really wants us to move out. So in a certain sense, we're caught between a rock and a hard place, we've got to assure the safety of our astronauts. We have a 2 year window here in which to make a decision. If it looks like it could be done for a reasonable additional amount of money to get this crew transport function done——

Senator BOND. It certainly would be a better——

Mr. GOLDIN [continuing]. And in a reasonable amount of time, we will do it. But we will have to get this decision made in the next year or two. But you are absolutely on the right track, and our proposal and plan that you have submitted from the President covers just this very point.

Senator BOND. Senator Mikulski?

Senator MIKULSKI. Mr. Chairman, I've concluded my questions.

Dr. Goldin, I'll see you at the NIH signing. I need to excuse myself for another hearing. And I also, in acknowledging your work and the members of your team, I would also like to acknowledge the work of the NASA I.G., Roberta Gross, and the job that she's done, and exactly what you said, where these have to be separate. But really, the fact that the NASA administrator takes the I.G. seriously, and the I.G. takes her role very seriously I think has helped us really get to the bottom of some of the issues we're facing.

So I am going to thank you.

Mr. GOLDIN. Thank you.

Senator MIKULSKI. Thank you, Ms. Gross.

Senator BOND. Senator Shelby.

PROLIFERATION—SECURITY

Senator SHELBY. Mr. Chairman, I just have a few observations in what you brought up, and that is proliferation, security and so forth. Dr. Goldin comes from the private sector and he understands how important research is, but also how important security is. So many things that you do in your research at NASA has many applications, oftentimes future military applications.

Mr. GOLDIN. We're proud of that, and we transfer that technology to the Department of Defense.

Senator SHELBY. You do well there. But there is, and for good reason, added emphasis on security securing what we have as best we can, because people in the world want it, they don't want to pay for it, and oftentimes we don't want to sell it. So that is very important, what your aide is doing there, and also what the I.G. is doing.

BIOMEDICAL RESEARCH

The other observation is what Senator Mikulski brought up just a minute ago, and that is the, I call it biomedical research, you know, and things, so many things that will come out of the basic research that you do, and working with the NIH, working with everybody else in the biomedical field.

It's things like that we couldn't think of. I think she used the word miniaturization, but it's even sub that, isn't it, Dr. Goldin. We just keep reducing it and reducing it, and we get a lot out of it. I can see, as a layman, the potential good that the American people will get out of this. And considering our budget, although it's hard, to fight and get it—and the chairman knows better than I do because he's on the front line. I think NASA is a bargain for America. But we shouldn't take it for granted.

Thank you, Mr. Chairman.

SHUTTLE SAFETY AND UPGRADES

Senator BOND. Thank you very much, Senator Shelby.

Mr. Administrator, we're getting near the end. The rest of it, I've just got a book or two full of follow-up questions for the record.

Let me here raise a question about, the Aerospace Advisory Panel since 1998 has expressed concerns regarding future shuttle safety and the need for upgrades. And independent review of shuttle safety released last month identified nine key issues as well as 81 recommendations to improve shuttle safety.

What steps are you taking to implement the recommendations and needed upgrades? What's the cost and how are you going to balance off the need for upgrades with the development of the reusable launch vehicle?

Mr. GOLDIN. First let me say, I didn't appreciate how crucial the NASA Administrator's role is relative to the safety of the astronauts. I used to put payloads in the shuttle, and I wouldn't worry until my payload came out when it was on orbit.

The first time I went down to a launch as NASA Administrator, the full importance of this job became very clear to me when I walked over and talked to the family members of the crew. You have to be there and see how they feel. I want to put some perspective on this for you. When I took over as NASA Administrator, the probability of a major problem occurring on the shuttle was about one part in about 70, 72. That was a very rudimentary calculation at the time. Today we believe it's about one part in 250. If you're a combat pilot, in combat, I'm told that the probability you'll have a major problem is one part in 20,000. If you get onto a commercial airliner, the probability of a major problem is one part in 2,000,000. So what you have to rely upon is the genius and ingenuity of the people you have to deal with three million things that

could go wrong, and fight the laws of probability, but you're never going to beat it by factors of 10.

We tried to change the culture, and we have not put people who watch people who watch people, but we get quality people taking responsibility for what they're doing, and we transferred functions to the private sector. And we said we'd monitor as we went along, and the Aerospace Safety Advisory Panel was with us until 1998 then they began saying "You know, we need to do some things." They made some suggestions, the people in Houston made some suggestions, people in Alabama made some suggestions, and Kennedy, and I took those suggestions to the President. And the Office of Management and Budget said,

"Yes, but you're developing a reusable launch vehicle." I said "But it isn't going to fly at least until 2010, and I am personally responsible for the lives of the astronauts. This isn't politics, this is not economics, it is mandatory, the number one priority of NASA, number one priority is protecting the lives of the astronauts as best we can, but not guaranteeing it."

And I got the budget that I asked for. I asked for an additional billion five on shuttle safety upgrades, and we are going to do fundamental things that these reports had asked for.

One, we use rotating machinery to provide auxiliary electrical power, it has toxic propellants. They thought it could be improved, that was their number one suggestion, the Aerospace Safety Advisory Panel, and the Shuttle Independent Assessment Team. We have money in the budget for that.

We made a whole list of things, we have another outside panel reviewing all these upgrades. But what I'd like to ask you to think about is say that the shuttle and the astronauts deserve our attention and we can't let go of the bat for a better grip while we're developing a new system.

I know it sounds strange, but we're going to have to spend what it takes to keep those astronauts safe. We're not going to spend money to make it cheaper to compete with other systems, but we will spend every nickel it takes to make it safe.

I learned from the Mars experience. I pushed the system, and we're now at a limit, and we are backing off. We're adding over a thousand people to the human space flight account at NASA, in Huntsville, at Cape Kennedy, in Houston and in Stennis, Mississippi. And if we have to add more people, I feel comfortable coming back to this committee and I will not be concerned about those wanting to compete on an RLV. The shuttle must be as safe as we know how to make it, and we're shooting for a factor of two immediately, and we think there are some other possibilities.

But I hope you understand the position I'm taking.

OVERSIGHT ON THE SPACE SHUTTLE

Senator BOND. Yes. Following along that line, I'm concerned about oversight on the space shuttle. The L.A. Times and the Dow Jones News Service reported on March 16, it appears that two flawed engine seals that should have been thrown away were reused on the Space Shuttle Atlantis. Not a new problem, apparently Space Shuttle Discovery with Senator John Glenn aboard flew with two defective seal segments.

As I said earlier, there are unknown dangers that may come up, but using something that should have been thrown away doesn't appear to be a very bright mistake. What happened there, and how did those things get in?

Mr. GOLDIN. Let me give you the big picture, and then I'd like to ask Joe Rothenberg to give you the details. But it gets back to, it was a sub-tier supplier that, as I understand it, didn't classify parts they got in the system, and our people made the discovery that those parts were in the system and searched them out. And they wouldn't launch the shuttle because they felt there were defective parts, and in one case we stopped the launch and said "there's a defective part in it" and pulled it back. So we don't believe we endangered the astronauts.

Senator BOND. So you did not use them, you stopped them before they went?

Mr. GOLDIN. When we learned about it, we did not launch. On one launch we weren't aware of it, and we did not have a problem. But when one of our people found out about it, they stopped the launch.

The thing about the shuttle that I'm so proud of is, any one person could stop a launch if they have a concern, and that system really works. But I might point out that when we had a wiring problem on the Chandra, when we launched the Chandra telescope, there was some nicks in the wiring that caused a short that could have been a problem.

We went back and we searched out and found nicks in the wires that existed from the day the shuttle was built. These are the issues we have to deal with, so when you find the problem you bore in. The key to it is when a problem is found, it is generally found by NASA and one of our employees, even at the lowest level. We stop, and we did stop when we found out about it. I'd like to ask Joe to go through the details of the issue in the L.A. times.

Mr. ROTHENBERG. Yes, sir. These are called tip seals, and during the launch of, I believe it was 103, in the process we discovered there were 12 seals built from an improper material. And the way these seals are made, they're sliced off like slices of bologna and then used, so there was one assembly.

We then went through a process, in that launch we knew during the flight readiness review that we had discovered that this happened. We found this back in the factory. We went through a process then of elimination to convince ourselves that there were none of those seals aboard 103, which was the Hubble repair mission in December, if I've got the dates right.

We went through that process, and what happened is, we could count on the engines on that mission not having any of the seals. We could not account for where all the rest of the 12 seals were. And what had happened is, when we came to the next launch, SRTM, we looked at it and at that point we were still not convinced that the seal, one of the residual 12 seals were not in one of those engines. So we actually delayed the launch to change out the engine, such that we could be positive that it wasn't on board.

So it was the same problem in the safety process we had in place—to catch it, we couldn't convince ourselves we didn't have it,

so we changed the engine out to be safe. So it was one problem and two actions to resolve it.

INDEPENDENT VALIDATION AND VERIFICATION

Senator BOND. I mentioned earlier the concerns, you've taken responsibility for the failures on the Mars program, we've recognized that it's appropriate to push the envelope of human nature and take all reasonable steps to ensure that we don't have a failure which is a coding mistake or a conversion to metric mistake.

Do you have any additional comments for us on how you're addressing these problems?

Mr. GOLDIN. I view the problem we had as not so much that the error occurred, but the fact that the system wasn't resilient to the error. The system should have been able to be tolerant of the error.

Let me back off a little bit and say, what is happening on the ground with the digital revolution is happening in space. Where in the past when we used analog systems and our engineers were comfortable with it with a relatively small software content, the digital content of our spacecraft is growing by leaps and bounds, the software is growing by leaps and bounds, and as a result, they're becoming much more complex.

So the tools of just 5 years ago are not as good anymore today. One of the areas that we believe we need to do some major work is in an area called Independent Validation and Verification of the software.

Senator BOND. That would be my question. With all of this new technology, this gives you much greater complexity, but it also gives you, does it not, give you the means to make a—to try out all these things and attempt to get a computerized judgment on whether the whole package works together?

Mr. GOLDIN. Yes.

Senator BOND. I am not technically competent, I am not at all proficient, but it seems to me that you ought to be able to develop a system to verify that all the widgets and gadgets and whozit's and whatzit's are fitting together properly. Is this possible.

Mr. GOLDIN. You are absolutely on the right track, and in fact we just sent a team to Fairmont, West Virginia, which is our Center of Excellence for Independent Verification and Validation. We are strengthening that activity. And I might say that Senator Byrd worked with us about 5 years ago to get that going. And I believe he made a major, major contribution because now we are ready, we have the technology there, we're putting them under the cognizance of NASA Goddard, and we are going to be insisting that our programs have this independent validation and verification—not to have their own people do it, but people outside the system. So that is going to be a significant process improvement, not just for the Mars program, but for everything we do at NASA.

ADVANCED SOFTWARE

There's another thing that you alluded to when you made the statement, and you said you didn't understand software. I think it's a very key statement you made.

The software we use right now are called hard deterministic software where you write each line of code, then you have to verify

that line of code and you have to check it, and it's very cumbersome and mistake-prone. NASA is developing, with some of our other partners, a new set of software which I'll call soft software, which has a capacity to learn.

I want to give this one example because it's cognizant, it's very appropriate for this point. We took 10,000 lines of code—I think it was 10,000 to 20,000 lines of code in what's called a neural network or learning software, and we replaced a million lines of code in an F–15 that operated the ailerons and the flaps, and we trained that software on a simulator with a pilot to figure out how to turn the ailerons, how to move the flaps to get that plane to fly.

After we had it trained, we put it in the plane and replaced the software. Then we trained it how to respond to failures, and we simulated the partial loss of a wing. And within 2 seconds it responded. We simulated loss of aerodynamic control surfaces.

So when you have software that has a capacity for learning, you could then use that software to check out the other software that you have. So we're going to follow a parallel path and in this year's budget we have significant money in that so that we can work on advanced software. And we'll work on independent verification and validation, and with these tools, NASA is going to develop techniques that will be not only improving our own systems, but it will be available to the commercial sector. So you are absolutely right on with your question.

OVERSIGHT ON THE SPACE SHUTTLE

Mr. ROTHENBERG. Mr. Chairman, I'd like to correct something I just said, in trying to remember numbers off the top of my head, I missed something in the chronology.

The problem with the tip seal was discovered post-flight on the Hubble mission, which was 103 in December during a boroscope inspection. The tracedown of the problem with the 12 seals, STS99, which was the SRTM to be launched in January, was the one where we went through and convinced ourselves it wasn't on board that vehicle. And 101, the rollout of 101, which was the next flight, was the one where we made the decision to change the engine to be safe.

Senator BOND. Thank you.

Senator Shelby, you had a question.

RELYING ON HUMAN LIFE

Senator SHELBY. Just an observation, may be a question.

First observation, Dr. Goldin, I think you're absolutely right when you talk about human life—very important. No thing is perfect, we know that, and there's risk in space, there's risk in our military. We witnessed what happened this past weekend with the hybrid vehicle that—we don't know what happened, we'll find out.

But quality control in the construction of a space vehicle or a military vehicle, I don't think you can do too much there. You are getting the tools, more tools, but there will never be a substitute for what the humans do—in building something. Because if it's put in there wrong, that is, a part, or if it's a defective part, or of it's not up to standard like it should be, and you've got a vehicle that's

made up of thousands if not more of parts, you do have a problem. It's not insurmountable, but it's a big problem, isn't it?

Mr. GOLDIN. It's very big.

Senator SHELBY. Not just in NASA, but in our military, in our marketplace, with everything.

Mr. GOLDIN. We human beings are frail, and we make mistakes, and what we have to do is be tolerant of the human spirit and encourage people to do the right thing. And in this case, we believe it's the smart thing to add more people. We're not adding computers, we're saying we need to add more people to the shuttle and the space station and the Human Space Flight account to make sure we're doing the right thing. Maybe at some point way, way out there we'll have computers do even more, but right now we've got to rely on people. People make mistakes, and what we try and do is set up a system that's tolerant of mistakes. We don't punish people when they make a mistake, because then they won't tell you when they're making a mistake. But I have to say they will continue to make mistakes in the environment that this man is trying to set for that human space flight area is the right one——

Senator SHELBY. Well, he's to be commended for his work.

Thank you, Mr. Chairman.

HIGH ENERGY SOLAR SPECTROSCOPIC IMAGER

Senator BOND. Let me point out just one other thing, and ask for your comments on it. I understand this is also JPL, but I gather that a 75 million high energy solar spectroscopic imager was damaged during tests in March when the engineers mistakenly shook the spacecraft 10 times harder than intended during a preflight test.

How much damage, what's the cost of the damage, and what kind of protocols can be put in place to lessen the likelihood of this kind of mistake?

Mr. GOLDIN. As I understand it, and we don't have the full failure report, there was a problem with the actual hardware, the shake table if you will, that simulates the rocket launch. Initially, it stuck and then it broke loose and put a force in larger than it should have. In this case, I don't believe it was human error. We'll have to wait for that report to come back and understand it.

Senator BOND. That was just something broke in the shake table, or——

Mr. GOLDIN. There may have been something wrong with the shake table, but we need the report. However, there are some advanced techniques that we're developing that would be fault-tolerant and make the system capable of handling something like that, and we're looking at some of these new techniques as part of the advancement of making things less susceptible to problems that occur with the equipment that we have, using new computer techniques, using new advances in sensors.

ADDITIONAL COMMITTEE QUESTIONS

Senator BOND. Well, thank you very much, Mr. Administrator. As I said, we have questions for the record, and I want you to be prepared for the announcement this afternoon. We thank you and your people for joining us today. We look forward to working with

you and following up on the other questions and all of the exciting programs you have.

[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 CHRISTOPHER S. BOND

CURRENT COSTS OF THE ISS

Question. What is the current cost estimate for complete assembly, and what is NASA doing to control costs?

Answer. The current estimate to complete the International Space Station (ISS), with a seven-crew capability, is between $24.1B and $26.4B.

NASA's schedule assessment, consistent with the fiscal year 2001 Congressional Budget submit, reflects assembly complete to be achieved in the range of May 2005 to November 2006. This assessment included a 3–5 month projected delay to the Service Module (SM) launch schedule of March 2000, and approximately 13 months schedule margin for potential unknown delays that could affect the remainder of the assembly sequence. (The Service Module was successfully launched and docked to the ISS in July 2000.)

From a budgeting perspective, NASA seeks to maintain reserves for the program for nominal cost growth and changes in requirements. This allows the program to prioritize requirements within a reasonable funding envelope, rather than seeking new funding every time a change is required or growth occurs.

On the program side, all design, testing, and operational changes are subject to a series of control boards and management processes prior to approval and incorporation into the baseline program. Proposals are subject to technical, cost and schedule evaluations to determine the necessity of each change. Additionally, the program office monitors and assesses contracts costs, performance and schedules on an ongoing basis (see also response #2).

It is believed that earlier NASA and program decisions to minimize development deferrals by maintaining hardware delivery schedules have avoided significant cost growth. Estimates for total Vehicle development of the ISS have been relatively stable over the past two years. Increases in the total ISS cost estimate have been driven by new requirements in response to contingency planning activities, and the "stretch-out" of the assembly sequence. These delays in the launch schedules have generally been accommodated without significant increase to projected annual funding levels. The impact of extension of the schedule is generally reflected in estimated cost increases in the operations and research areas.

BOEING COST OVERRUNS, ISS

Question. Please review your corrective actions to date that address these cost overruns.

Answer. Approximately $1 billion in cost growth is derived from Prime contractor under-performance to the original contract estimate and schedules. Production and performance problems, qualification test and rework problems, and software delivery delays typical of most new technology programs, as well as labor rates increases, are contributing causes.

The ISS is a large, unique, and complex vehicle, and NASA anticipated some cost growth as hardware elements and software packages are integrated and tested as complete launch packages for the first time. However, Boeing's cost growth is a deep concern. NASA has undertaken a variety of corrective actions since cost and schedule variances first began to appear to mitigate the cost and schedule implications. In addition to actions we have initiated, the program has also received recommendations from numerous external review groups and has been responsive to their recommendations as well. As the Program has transitioned from development to operations, NASA adjusted its approach, thereby maintaining effective contract management. This has been a complex and difficult undertaking, but NASA believes it has resulted in improved Prime planning, scheduling, and control processes on baseline ISS content. Some of the past actions taken include:

—Stepped-up surveillance when potential risks have been identified, in order to apply appropriate funding and work force resources to trouble spots and to maintain station hardware and software delivery schedules.

—Identification of non-production-related activities that might be curtailed or eliminated early to free resources needed by production and test teams.

—Formally requesting the NASA Inspector General's office to review NASA's contract management processes as well as inviting other external advisory groups to provide advice and recommendations.
—Establishing more frequent reporting requirements and adjusting reporting processes.
—Working with the Prime contractor to achieve a monthly de-staffing plan which calls for a systematic reduction in staffing at the prime locations and the product groups.
—Identification of areas of Program content under the Prime scope of work which could be pulled out and performed less expensively.
—Working with the Prime's corporate management to ensure that required corporate assets are available to this critical Program and that the necessary levels of management experience and tools are applied.
—Working with the Prime to develop and implement as rapidly as possible a workforce destaffing plan that aggressively removes Tier One and Two contractors from the work force as soon as hardware and software development efforts are completed.
—Restricting change orders to the contract to only those that are absolutely essential to the successful operation of the Station.
—Structuring contractor incentive and award fee criteria that clearly demonstrate NASA's overall concern with performance.

As a result of Boeing's last cost increase in early 1999, NASA negotiated a restructure of the contract to better focus resources on the development work remaining. The restructure reorganized Boeing's work into four categories, with the development effort tied to previous delivery milestones. A new fee structure allows Boeing to gain some additional fee if its performance improves, and contractor staffing and production milestones are monitored very carefully by the Program Office and at Headquarters. Other development activity which is primarily integration and operations (I&O) in nature, was reassigned to a completion form effort tied to key launch package milestones. This allows Boeing and NASA to redirect resources to critical hardware and software production or integration areas as unforeseen problems arise. Prime spares production was segregated to allow the government more visibility into the delivery of high value replacement parts. All new development work, additions to contract scope, will be held separate from the core Prime effort, and will be under a different fee structure which gives the government increased leverage over Boeing's future performance. Boeing may earn up to 11 percent fee on the new work, or no fee at all if performance is unsatisfactory.

BOEING REORGANIZATION

Question. What is the cost of Boeing's reorganization that NASA has or will pay for? How is the amount determined and how are savings measured?

Answer. The costs and savings associated with Boeing's restructuring activities are included in Boeing's overhead accounts, which are distributed across all of Boeing's contracts, including those with both NASA and the Department of Defense. Government review of Boeing's restructuring activities is performed by the Defense Contract Management Agency (DCMA) which is assigned the responsibility to act for the entire Government to ensure that indirect expenses, including restructuring and reorganization expenses, meet the appropriate criteria required by Government regulation and that all Government contracts receive equitable treatment.

The DOD Federal Acquisition Requirements (FAR) Supplement requires that a contractor achieve a 2-to-1 savings-to-cost ratio for external restructuring activities, which are non-recurring, and included events such as facility closings and consolidations. Other indirect costs associated with mergers and acquisitions that result from changes to accounting structures, management systems, and the establishment of common processes, are not subject to the FAR Supplement savings-to-cost requirement, but are subject to standard cost allowability criteria. The $82 million of cost for NASA identified by the NASA IG represented an early Boeing estimate of NASA's share of total indirect costs associated with the Boeing reorganization, and included both external restructuring costs and other indirect costs.

An advanced agreement signed by Boeing and DCMA achieves over a 3-to-1 savings-to-cost ratio for external restructuring activities over a five-year period. NASA's share of the external restructure savings is calculated to be $63M against $20M in costs, and DCMA has quantified actual savings for NASA of $14.3M against $5.5M in costs through the end of fiscal year 1999. The other indirect costs resulting from the reorganization are under review by NASA and the DCMA. Accounting change cost impacts are reviewed prospectively by DCMA as part of the Government's Cost Accounting Standards administration processes, which protect the Government, as

a whole, from paying unreasonable cost increases. However, because this type of impact is just one component of the company's overhead cost structure, it becomes difficult over time to isolate the costs and savings of these actions from other events and actions that affect indirect costs. Early indications are that these costs may offset a significant portion of the savings achieved with the external restructure activities, but the total impact is not yet known.

CRITICAL PATH ISS HARDWARE AND SOFTWARE

Question. There remains huge concerns regarding Russia's inability or lack of commitment to meet its obligations as a partner in the ISS. I am very concerned about additional cost and duplication by the United States. What are the key pieces of hardware and software that Russia is responsible for and are essential to complete the assembly of the ISS?

For purposes of this response, the term essential will be considered as a capability, without which ISS program schedules could be deferred by a period of one year or more, or in which Program cost could increase by over $1 billion beyond that currently budgeted. The essential contributions Russia is providing are best characterized by addressing ISS capabilities. A summary of these capabilities follows:

Propulsion.—Russian partnership responsibilities have included propulsive guidance, navigation, and control since the inception of the International Space Station in 1994 (Service Module, Progress resupply, FGB operations). The two primary functions provided by Russian contributions in the propulsion area are reboosting the station to keep it at a safe altitude, and providing attitude control during reboost and for collision avoidance from orbital debris when necessary. NASA is mitigating this risk through use of Shuttle reboost and development of the Interim Control Module (ICM) that provides redundant capability for reboost, and development of a Propulsion Module (PM) which can provide both reboost and attitude control. At the current time, U.S. contingency plans do not provide a 100 percent redundant capability over the entire ISS life cycle.

Command and Control.—The NASA Flight Director, located at Mission Control-Houston will always maintain the leadership role for commanding. However, the Russian control center will determine and issue commands to their respective on-orbit segment. While the ISS command and control system is designed to allow both Russian and U.S. mission control centers to transmit data and commands to the ISS and between their respective on-orbit segments. Russian ground equipment, Russian FGB and Service Module technical knowledge, and Russian vehicle operational skills remain essential to the success of the program.

Crew Habitation.—The Russian-provided Service Module provides environmental control and life support systems (ECLSS) and living quarters for three crew throughout the life of the ISS. When launched, should Russia falter, the U.S. cannot maintain the SM without extensive technical insight and development of operational capabilities. Sustaining engineering and system spares development cannot be performed without extensive engineering knowledge of the vehicle. Absent this information, the SM would need to be decommissioned in some manner and the ISS crew capability would be reduced by three people.

Logistical Capabilities

Dry Cargo Transfer.—Partnership agreements call for the Russians to provide dry cargo via the Progress cargo ship. Depending on the extent of the shortfall, the loss of this important function could be offset by delivery of dry cargo by U.S. vehicles as intended by the Alternate Access element of the Space Launch Initiative, or by bringing up additional dry cargo on Shuttle flights, which could negatively impact the assembly schedule. In addition, the Japanese HII Transfer Vehicle (HTV) will deliver dry cargo to the station.

Propellant Transfer.—The only vehicles capable of providing fuel to the SM and FGB are the Russian Progress cargo ship and the European Space Agency (ESA) Automated Transfer Vehicle (ATV).

Question. What is NASA's policy for addressing the risk of Russia failing to meet its obligations and what are the associated costs?

Answer. NASA's approach to contingency planning is to incrementally fund only those activities that permit the United States to continue to move forward should the planned contributions of our ISS partners not be delivered as scheduled, rather than to assume the responsibilities of other ISS partners. In fiscal year 1997, the budget line item entitled, U.S./Russian Cooperation and Program Assurance, was established. This budget line item had two parts, U.S./Russian Cooperation (Russian Space Agency contract support) and Russian Program Assurance (RPA). The first part, primarily support needed to accomplish Phase 1 of the ISS program (Shuttle/Mir), has been completed. The second part, Russian Program Assurance (RPA), was

re-established within the Space Station budget line. The RPA budget was established to fund contingency activities and backup capabilities in response to concerns about the impact of the Russian Government's problems in meeting their ISS commitments.

The RPA funding provides contingency activities to address ISS program requirements resulting from delays on the part of Russia in meeting its commitments to the ISS program, allowing the U.S. to move forward and build the ISS in spite of Russian shortfalls. These contingency activities are not intended to fully protect against the loss of Russian contributions. Depending on the degree of Russian shortfall, it could cause an extended delay to the program, necessitating additional crew return, life support, reboost, and guidance and control capabilities to replace planned Russian contributions, and result in a significantly less robust space station. In spring 1997, NASA embarked on the initial steps of a contingency plan that consisted primarily of the development of an Interim Control Module (ICM). During summer 1998, NASA initiated activities to build a U.S. propulsion capability, enhance Shuttle logistics capabilities, modify the Shuttle fleet for enhanced Shuttle reboost of ISS, and a limited procurement of needed Russian goods and services to support Russian schedules for the Service Module and early ISS Progress and Soyuz launches.

NASA believes its approach of working with Russia to assure near-term critical capabilities while developing independent U.S. capabilities over the long-term provides the best approach to address the impacts from the Russian economic situation.

The Russian Program Assurance (RPA) total funding is estimated at about $1.3 billion, of which about half was appropriated between fiscal year 1997–2000. The focus of these funds is developing redundant capabilities in the U.S. Only a fraction of this the funding is planned to purchase needed goods and services from Russia. ISS schedule delays have resulted in cost impacts and additional Shuttle flights, which are reflected in the ISS operations and research funding estimates and the Shuttle budget. While Russian delays have contributed to overall schedule delays, U.S. and other International Partner delays have also contributed.

Question. Can we complete the ISS without Russia and what steps would NASA have to take under what timeline to complete the ISS?

Answer. Elimination of Russia from the ISS Program would clearly result in a significant redesign and/or operational changes to enable ISS assembly without on-board crew. It would be less capable, much more costly, and significantly delayed. It would also likely result in a loss of international political support due to lengthy deferral in the assembly buildup.

The delay to the assembly timeline would certainly be measured in years, but just how much would be dependent on what level of Russian cooperation would exist prior to their departure. Without their support ISS elements on orbit would be at risk. Without Russia, we would likely separate from the FGB, Service Module or any other Russian elements we could not sustain independently. We would place the Interim Control Module (ICM) in orbit, but not continue to build beyond a minimum station keeping capability until we had a clear confidence in the launch date of a permanent U.S. propulsion capability, with adequate ICM propellant reserves to proceed.

Question. Are there any sanctions in the state-to-state agreements for failure to meet obligations, such as termination?

Answer. Each Partner's ability to meet its obligations is predicated on availability of appropriated funds and best efforts to achieve technical milestones. While the Service Module has encountered delays, RSA has met its operational responsibilities to date. Should any partner fail to perform its operations responsibilities or to provide for its share of common system operations responsibilities, all partners would meet to jointly determine what action should be taken. Such action could result in an appropriate reduction of the failing partner's rights to its allocations.

Question. How much money has NASA spent to date to backfill or meet existing Russian obligations?

Answer. None. RSA has met its operational responsibilities to date.

Question. Once the station is complete and in orbit, to what extent are we dependent on Russia where our astronauts would be at risk?

Answer. Regardless of the makeup of the international crew, all partners are committed to crew safety. Rules and procedures are designed to preclude exposing the crew to unwarranted risk. Crew will not be launched or maintained in an unsafe environment, nor without certainty of safe return in the case of operational anomalies or health problems.

The Russians are responsible for capabilities that contribute to the safe operation of the station and crew safety. They are committed to maintaining a Soyuz on-board the station for the duration of the operational period. This will be augmented by

a crew return vehicle currently in the planning stage. Their responsibilities also include propulsion and logistics resupply contributions. Any operational failure or shortfall that puts the crew at risk would mandate the return of the on-orbit crew.

NASA's overall knowledge of space flight and the difficulties of living and working in the harsh environment of space has been strengthened through our Russian partnership. Likewise, the station has a more robust on orbit infrastructure and transportation capability to respond to unforeseen events. Russian segment specifications and safety requirements are in place and their hardware goes through the same thorough safety review process as NASA and other internationally provided hardware. NASA has a rigorous safety review process developed over the past thirty-plus years of human space flight. We have made concerted efforts to understand and address compliance with requirements from a safety perspective between Russian Aviation and Space Agency (Rosaviakosmos) and NASA. Safety of flight, is, and will continue to be, our number one goal. This does not change with the involvement of the Russians or any of our other international partners.

COSTS OF OPERATION OF THE ISS

Question. NASA has estimated that the cost to operate the ISS will average $1.3 billion, or $13 billion over a 10-year mission life from 2005 to 2014. What activities are these costs associated with? For example, do these costs include the cost of spares? What are the responsibilities of other partners to maintain and operate the ISS?

Answer. The cost estimates for ISS operations include all on-orbit mission operations, cargo resupply and return, crew operations and support, on-orbit maintenance, ground operations, launch processing (exclusive of Shuttle flight costs), sustaining engineering, spares and logistics. Also included are science utilization costs, and the operation of research capabilities and facilities supporting on-orbit science. Most spares for the ISS Program are being purchased up front, as many sources of supply will cease production after the station is assembled. The operations estimate includes the replacement of some spares where demand analyses have determined they will be necessary and where the industrial base will support reprocurements. It also includes costs for expendable supplies and consumables needed for core station operations. In addition to the ISS costs, approximately 5–6 Shuttle flights per year are anticipated for operations and research logistics and resupply, and crew transport.

Not included in the $1.3 billion estimate are costs associated with any continued development or preplanned program improvement (P3I) for the core station or research capabilities. The current space station budget does not include funds for these activities, but they could be considered in future budgets.

Per the intergovernmental agreements with each ISS Partner, common operating costs are shared among the U.S., Canada, ESA, and Japan. Russia is responsible for 100 percent of the cost of operating its on-orbit segment, and all partners support their own elements. The Russian provision of propulsion, logistics and crew transport for the total ISS operations offset their share of common operations costs. Of the $1.3 billion estimated for average annual U.S. ISS operating costs, about $300M is expected to provide common cost operations. The U.S. is responsible for 77 percent of these costs, while Canada, ESA, and Japan will cover the remaining 23 percent. As station resource needs have matured, and partner capabilities to deliver cargo, especially propellant, have been factored in, NASA expects much of the ESA and Japanese responsibilities will be offset by contribution of common cargo delivery services. These contributions will not reduce the $1.3 billion average annual U.S. funding for the ISS, but rather reduce the requirement for U.S. Shuttle flights.

MANAGEMENT OF ISS RESEARCH

Question. NASA, in the past, has suggested the creation of a non-government organization (NGO) to manage the science research on the ISS. What is the status of this suggestion and how would this approach be better than NASA's current approach to selecting and managing science research? What would be NASA's relationship to this NGO be, and are there any additional costs that must be considered?

Answer. NASA has initiated an internal study with representatives from Headquarters, the Johnson Space Center, Kennedy Space Center, and Marshall Space Flight Center that is scheduled for completion in Fall 2000. The first task is to thoroughly and comprehensively define in detail the specific functions associated with ISS research and utilization, as well as the current performing organizations and budgets. The second task will be to develop one or more options for re-allocating the functions among the organizations, including a potential NGO. Finally, if one of these options appears to offer distinct advantages in terms of ISS research produc-

tivity over the life of the program, NASA will consult with the executive and legislative branches, as well as our international partners, before any final decision.

The purpose of the internal study will be to determine if there is a better approach and if the principle of "continuous improvement" can be applied effectively to the ISS research program. NASA has experienced success in the past through the use of non-government organizations, such as the Space Telescope Science Institute, National Space Biomedical Research Institute, and other non-government research institutes. This experience may have been instrumental in leading the National Research Council Task Group to their conclusion that, "The strengths of the recommended [NGO] approach include its strong support for research, logical division of roles, well-focused responsibilities, and flexibility for evolution." (NRC Space Studies Board and Aeronautics and Space Engineering Board, Institutional Arrangements for Space Station Research, December 1999, p. 47.)

If NASA proceeds, a direct contractual relationship, obtained through a competitive procurement process, appears to be the most effective approach. This is consistent with both our past experiences and the NRC's recommendation. In all cases, NASA would continue to maintain full fiduciary responsibility for all public funds appropriated.

There may be additional costs associated with the start-up period, during the transition phase. This will be determined during the course of the internal study. It is premature to project costs without detailed definition of the scope of functionality.

SPACE FLIGHT OPERATIONS CONTRACT PHASE II COST BENEFIT ANALYSIS

Question. Mr. Goldin, I applaud your efforts to improve efficiencies throughout NASA through your "Better Faster Cheaper" approach. However, I remain deeply concerned that contract oversight is insufficient and I am skeptical of some consolidation efforts. For example, a recent audit found that NASA had not performed a cost-benefit analysis prior to consolidation of Space Shuttle prime contracts into one prime contract with the United Space Alliance. This indicates to me that you are not relying on a complete analysis and documentation of estimated benefits for the consolidation. This lack of analysis also fails to provide you with a baseline by which you can later determine whether or not the consolidation was successful. I understand that you will ensure an appropriate cost-benefit analysis is conducted and applied to all phases of the operation. When will these corrective actions be complete and how will you ensure that these corrective actions are applied to consolidation efforts in the future?

Answer. An effort is currently underway at the Johnson Space Center (JSC) to analyze the cost benefit of consolidating the External Tank, Solid Rocket Motor and Space Shuttle Main Engine projects under the Space Flight Operations Contract (SFOC) and is expected to be complete in the late CY00. This analysis will serve as a baseline and be one of a number of criteria to aid the Associate Administrator of Space Flight in determining the "End-State" of Space Shuttle Operations (see attached memorandum dated March 16, 2000).

Should the Associate Administrator determine that further transition of Space Shuttle projects to the SFOC is in the best interest of the government, an additional cost benefit analysis will be conducted prior to the transition of each project.

In conjunction with the fiscal year 20O2 budget formulation, the Space Shuttle program is also validating the cost benefit of the transition thus far. That information will be available with the release of the fiscal year 2002 budget.

GP–B

Question. Gravity Probe-B, a spacecraft designed to test Einstein's theory of relativity, is currently some $70 million in cost overruns with a potential slip in its launch schedule to 2002. When is enough and a project canceled?

Answer. NASA's management procedures call for a termination review when projections show that a project will exceed its baseline cost, schedule, or technical performance requirements by ten percent or more. A project will be considered for termination when a thorough assessment concludes that there are no options for meeting the project's baseline requirements, coupled with a determination that the science objectives do not warrant making extraordinary sacrifices to proceed with the project. The goal of our termination review process is to maintain the delicate balance between achieving scientific objectives and living within our prescribed resources.

The NASA Program Management Council recently reviewed the GP–B program in response to the technical and cost problems, and a new system of management controls has been established for the program. In particular, a series of Head-

quarters-controlled, near-term (April 2000–April 2001), critical milestones has been created. We are closely monitoring the progress made toward these milestones. Failure to meet this milestone schedule may result in a termination review by NASA's Program Management Council.

Question. Also, what other missions are suffering from having to pick up the shortfalls on this project?

Answer. Decisions on funding GP–B will be finalized within NASA's fiscal year 2001 initial operating plan. Details are not known at this time, and will depend, in part, on GP–B program performance against the critical milestones described above over the remainder of the current fiscal year.

Question. Basically, what are the rules of the road for cost overruns? What kinds of reviews are required to justify the continued funding of a project that has slipped this badly?

Answer. There is a hierarchy of reviews at NASA, beginning with regular reviews at the Program Manager level. Centers also conduct regular reviews via their Program Management Councils, which feed in to regular reviews at the NASA Enterprise level in Headquarters. Finally, the NASA Program Management Council, chaired by the NASA Deputy Administrator, also reviews major programs (such as GP–B) on a regular basis. The "rules of the road" on cost overruns are as described in the answer to Question 8 above.

LIVING WITH A STAR INITIATIVE

Question. NASA is proposing a new program, Living With A Star, that would have initial funding of $20M in fiscal year 2001, with total costs of $511 million through fiscal year 2005. I support the mission of the program that will focus on understanding the origin of solar disturbances and how they affect human-made space and terrestrial technology. However, the total cost of the program through fiscal year 2010 will be about $1.7 billion. This represents a huge outyear commitment, which must be measured against existing obligations. Where would you place this program in a priority list of the Space Science programs or does NASA intend to reduce funding for Earth Science missions to pay for these costs? What makes this program so valuable and why can't the goals of this program be achieved through the Sun-Earth Connections program?

Answer. Living With a Star is important because it seeks to develop the scientific understanding necessary to effectively address those aspects of the connected Sun-Earth system that directly affect life and society. It is the study of the physics of solar variability and its effects. Why do we care? We have increased dependence on space-based systems, soon a permanent presence of humans in Earth orbit, and eventually human voyages beyond Earth. Solar variability can affect space systems, human space flight, electric power grids, GPS signals, high-frequency radio communications, long range radar, microelectronics and humans in high-altitude aircraft, and terrestrial climate. Prudence demands that we fully understand the space environment affecting these systems. In addition, given the massive economic impact of even small changes in climate, we should fully understand both natural and anthropogenic causes of global climate change.

The new Living With a Star missions will provide unique capabilities not available from the on-going Solar Terrestrial Probes series of missions to be developed in the next decade. The Solar Sentinels will provide for the first time, the ability to observe the entire solar surface, including the side of the Sun facing away from Earth, and thereby observe "solar weather" globally. This will enable improved long range prediction of "space weather" and enable a more complete understanding of the life cycle of solar storm regions which are normally hidden from Earth's view for half their lifetimes when they rotate onto the solar farside. The farside Sentinel will also fill in a gap in solar seismology data used to probe the solar interior. The Solar Dynamics Observatory, a follow-on to the highly successful SOHO mission, will have high temporal and spatial resolutions to enable tracking of solar storm regions above and, for the first time, below the solar surface. This new capability, coupled with SDO's measurements of long term solar cycle dependent changes in the solar interior where the solar dynamo or "solar weather engine" resides, will enable major progress in understanding the physics of solar variability—why the Sun varies. The Geospace Mappers are specifically targeted at studying those aspects of geospace affecting human activities, unlike the Solar Terrestrial Probes geospace missions which have a pure science focus and therefore may or may not address physics problems related to human utilization of space.

The LWS initiative was developed taking into consideration activities planned for the on-going SEC program, as well as the results and recommendations of the recent Space Science strategic planning process. The program also takes into account

the multiple national interests discussed in interagency discussions and reports involving the National Space Weather Program and the Office of the National Space Security Architect, and scientific objectives given in reports of the National Research Council/National Academy of Sciences. The National Security Space Architect (NSSA) Space Weather Study and subsequent NSSA Space Weather Architecture Transition Plan states: "Fundamental to the success of the Space Weather architecture is a robust, user-focused R&D program addressing the unsolved scientific problems that prevent current Space Weather products from meeting user requirements. The R&D program shall encompass basic research leading to the development of physics-based Space Weather models, development of Space Weather sensors, and generation of Space Weather products for users in all three domains, i.e., the solar and interplanetary medium, the magnetosphere, and the ionosphere/thermosphere." This is a primary goal of the LWS program. It is designed to meet critical scientific objectives articulated in the NSWP and NSSA reports. The NSSA Space Weather Study also points out that research and development sensors are a valuable data source and greatly benefit data-starved operations. The LWS missions will continue the NASA tradition of providing such data, as currently done with research missions such as ACE, Yohkoh, SOHO, and IMAGE.

Addressing these multiple national interests properly in a timely fashion requires an expanded program studying solar variability and its effects. To meet this challenge NASA's budget request for fiscal year 2001 includes a budget increase that averages out to a little more than 1 percent in its yearly budget over the next decade. NASA does not intend to reduce funding in Earth Science missions to pay for the LWS program. LWS will provide important information about solar inputs that affect the Earth system and thereby complement Earth Science research into climatological, geological, biological, and anthropomorphic Earth system inputs. LWS is the highest priority new Space Science program.

THE INTEGRATED SPACE TECHNOLOGY PROGRAM

Question. NASA is requesting some $730 million in the Integrated Space Transportation program, with a 5-year total of some $4.4 billion to develop a technology base for the replacement of the space shuttle. This program is designed to develop a second generation Reusable Launch Vehicle (RLV) program. The program is designed to attract the investment of the private sector in the development of new space transportation options, with the private sector taking the lead in development and funding after 2005. NASA plans to use this program to solicit new ideas and build on the X–33 program, the X–34 and the VentureStar as a technology base for the development of new technologies and vehicles. Nevertheless, it is not clear whether there is adequate private interest for the type of financial commitment that will be necessary to successfully finance and complete a shuttle replacement.

We clearly need to find a cheaper way to access space to ensure commercial interest and growth. However, what makes $4.4 billion the right amount of funds to develop these new technologies and attract the private sector. I want a specific answer, not a general answer.

Answer. Private sector interest in developing a new launch vehicle is predicated on two prerequisites: (1) reasonable technical certainty that a new vehicle can be built and competitively operated at projected costs, and (2) reasonable market certainty that a customer base large enough to use a new vehicle will exist.

The $4.5 billion Space Launch Initiative directly addresses prerequisite #1 above and is a key component of NASA's overarching Integrated Space Transportation Plan, which coordinates investments in Space Shuttle safety, a Crew Return Vehicle for Space Station, base space transportation research, and the Initiative. The goal of the Space Launch Initiative is for NASA, by 2010, to meet its human space flight needs on commercial launch vehicles that will improve safety and reduce costs. NASA plans to undertake three major activities through the Initiative to meet this goal:

—One, invest in technical risk reduction activities to enable competitive, full-scale development of privately owned and operated launch vehicles by 2005 (Risk Reduction and Competition, $2.4 billion);

—Two, develop hardware that can be flown on these commercial launch vehicles to meet NASA's unique needs, such as crew transport (NASA-Unique Systems, $1.6 billion); and

—Three, pursue procurements of existing and emergent vehicles for select Space Station needs as a means of providing near-term, assured access and demonstrating new, innovative approaches (Alternative Access, $300 million).

In addition to these three major activities, the Space Launch Initiative also funds ongoing x-vehicle programs like X–34 and X–37 and critical systems engineering

and requirements definition activities that will tie these elements together ($200 million).

The fiscal year 2001 budget runout for the Space Launch Initiative reflects the Administration's current best estimate of what it takes to reduce the technical risks of developing a second-generation, Earth-to-orbit launch vehicles for at least two viable, competing designs prior to the 2005 competition (prerequisite #1 above). The estimate, and the structure of the Space Launch Initiative, are based not only on the lessons learned in the Space Shuttle, X–33, and X–34 development programs, but also on the results of the industry-led Space Transportation Architecture Studies of 1998–99. Industry inputs from these studies fed directly into the planning estimates for the Space Launch Initiative.

This process resulted in a prioritized list of technology investments based on investment options that NASA examined through an analytical hierarchy methodology. Each technology was subjected to a cost/benefit analysis and ranked based on potential payoff to cost, safety and technical risk. All analyses were based on architecture-level economic metrics.

The results of the integration and analysis process served as the foundation for a series of roadmaps that illustrate the development required to advance the Technology Readiness Levels (TRL) of the key technologies to the point that they are mature enough for full-scale development. These key technologies include: crew escape and survival systems; operable, long-life propulsion systems; long-life, lightweight integrated airframes; advanced thermal protection systems; integrated vehicle health monitoring systems; and vehicle operability.

It is important to note that NASA has more limited capability in directly addressing prerequisite #2 above. If the Space Launch Initiative is successful in developing one or more commercially competitive, privately owned and operated launch vehicles that reduce cost and improve safety, NASA will transition its human space flight needs to the commercial market, thus enlarging and further stabilizing the overall launch market. However, NASA human space flight needs will still only comprise a fraction of the overall launch market. Developments in the non-NASA portions of the launch market could substantially alter industry investments in new launch vehicles. If the commercial launch market were to stay flat, the level of industry cost-sharing for full-scale development of a new launch vehicle would likely be smaller than if the market were to grow substantially. For this reason, NASA has taken a staged approach to the Space Launch Initiative, i.e. reducing technical risk and reassessing market conditions prior to the 2005 competition. It is also for this reason that NASA is pursuing investments outside the Space Launch Initiative through ISTP in areas like Space Shuttle safety.

LACK OF STRATEGIC PLANNING FOR THE SPACE TRANSPORTATION MISSION (S–34)

Question. One of your "faster, better, cheaper" projects is the X–34 Technology Demonstrator. Recent reports that NASA has not adequately performed strategic planning for the Space Transportation mission lead me to believe that you should put more emphasis on the "better" portion of the equation. Requirements for the next-generation Reusable Launch Vehicle (RLV) technology must be clear, and management should be confident that the technologies resulting from the X–34 project support RLV needs.

Please update us on NASA's strategic planning and management initiatives to improve the overall effectiveness of Space Transportation programs and projects.

Answer. The intensive study, review, and planning that went into NASA's Integrated Space Transportation Plan, and especially the Space Launch Initiative, is the single, largest, recent improvement in NASA's space transportation programs. ISTP improves NASA's space transportation programs in two key respects:

1. ISTP coordinates future decisions across all NASA space transportation investments. For example, Space Shuttle safety investments are now focused on improvements that will be fully in place by 2005 so that Shuttle can benefit from these safety investments before a potential replacement would be available through the Space Launch Initiative in 2010. In another example, prior to a full-scale development go-ahead decision on a Space Station Crew Return Vehicle, NASA will fully examine a range of designs for other, cost-effective options that meet both the crew return need and other needs, such as crew and cargo transport, on future launch vehicles developed under the Space Launch Initiative.

2. ISTP, and especially the Space Launch Initiative, provide multiple, competing paths to future systems with back-up alternatives. For example, the Space Launch Initiative seeks to reduce technical risk for at least two competing Earth-to-orbit launch vehicle designs to enable full-scale development decisions in 2005 with operational vehicles by 2010. By pursuing at least two competing designs, NASA intends

to spur industry innovation and have more than one development path if technical issues pose roadblocks to a particular design. If technical issues or market conditions delay development decisions in 2005 or operability by 2010, ISTP is making concurrent investments in Space Shuttle safety to ensure continued U.S. human access to space. In the near-term, the Space Launch Initiative also seeks alternate means of access to Space Station for cargo on existing or emergent commercial launch vehicles to back-up the Space Shuttle.

With respect to X–34 and other existing x-vehicle programs, decisions on expanding investments in those vehicles will be tied to industry proposals under the larger Space Launch Initiative to reduce technical risk and prepare viable, competing designs for the 2005 competition. In this way, ISTP coordination and Space Launch Initiative goals provide an important context for decisions on specific space transportation investments.

NASA'S MISSION

Question. There has been very little discussion of what happens after the assembly of the ISS. There has been no public discussion of NASA's mission. Nevertheless, internally, and despite the current failures in the Mars programs, NASA seems to be focusing on Mars, possibly as a manned base. What is NASA's long term mission focus?

Answer. While NASA's first priority is to complete the International Space Station to reap the benefits of long-duration research in space, we also continue to invest in research strategies and technologies to prepare for more challenging future missions. While we have not identified specific long-term missions or goals for the era after the International Space Station is fully operational, NASA is committed to taking steps now to prepare for challenging future goals and missions. We have initiated Agency-wide decadal planning studies designed to enable NASA to create a variety of blueprints for human and robotic space exploration scenarios, following ISS operations.

One of the early outputs from these studies is the universal recognition that reliable and cost-effective space transportation remains the key enabler of a more robust civil space program. To meet this crucial need, NASA's new Space Launch Initiative makes the critical investments to assure more reliable access to space in the years ahead. In addition, we continue to invest in new science and technology initiatives in biotechnology, nanotechnology and information technology. These technologies will provide NASA with a new pathway to revolutionize our missions and the scientific and engineering systems that enable them, bringing down the cost, while enhancing safety. These strategic investments must be made in the near term if we are to expand our presence in the solar system in the long term, no matter what specific missions are ultimately pursued.

STAFFING NEEDS

Question. For fiscal year 2001, NASA is proposing to increase its FTEs by 328 people following several years of downsizing. This request reflects recent concerns that NASA has downsized to quickly. The recent 1999 Annual report of the Aerospace Safety Advisory Board identified workforce staffing needs as its #1 finding in that "the continuing downsizing at the Office Of Space Flight Centers, coupled with the effects of the prior hiring freeze and unplanned departures, has produced critical skills deficits in some areas, growing workforce pressure and stress levels, and a serious shortfall of younger S&Es". Staffing concerns have become so acute that the Administration has asked for $20 million in the fiscal year 2000 Supplemental bill for staffing increases.

The report gave workforce needs an aura of an emergency. Did this problem sneak up on NASA and what are the most critical workforce needs?

Answer. Due to concerns raised from within by internal reviews such as the Core Capability Study and by outside groups such as the Aerospace Safety Advisory Panel, senior NASA management became convinced that we had gone too far in our reductions at the Space Flight Centers. In the first quarter of fiscal year 2000, we decided to discontinue downsizing at these Centers and begin the revitalization of the workforce to correct skill shortages and imbalances. We decided that the staffing situation required more immediate action and an accelerated hiring plan was proposed. This plan included hiring 550 new personnel across the Space Flight Centers in fiscal year 2000 followed by 300 in fiscal year 2001 and one-for-one thereafter in order to reach a staffing levels that strengthen program management and ensure Shuttle safety. Since the fiscal year 2000 budget had already been passed when the decision to begin the revitalization in fiscal year 2000 was made, a supplemental bill was needed.

These new critical staff hires are intended to support program requirements for Space Shuttle Operations and Upgrades, Space Station Development and Operations, Expendable Launch Vehicles, Advanced Space Transportation Technology and other Center mission related and administrative requirements. The hiring of these new employees is geared to alleviate stress impacts resulting from expanding workload pressures; eliminating critical skill shortages across our programs and Centers; and pursuing fresh-out hires to revitalize our Science and Engineering (S&E) knowledge base for future program and project management responsibilities. In addition, NASA is seeking to refocus our workforce composition towards a future oriented research and development base.

MIR

Question. Despite promises by the Russians to deorbit the Mir, Russia seems committed to maintain the Mir as an active space station. What impact will this have on Russia's commitment to the ISS and what steps is NASA taking to ensure that resources that should be going to the ISS are not being redirected to the Mir?

Answer. NASA believes that it would be extremely difficult for Russia to support two space stations simultaneously, even if funding were obtained. As such NASA continues to press RSA on their specific plans for Mir. However, NASA believes that any decision concerning the future of Mir is the purview solely of the Russian Government. RSA has assured NASA that ISS remains its top priority and that Mir will remain on-orbit only if the resources can be found to maintain the two stations simultaneously and that the Mir lifetime can be accomplished with no impact to the ISS as long as both space stations do not concurrently experience off-nominal situations.

REMOTE SENSING

Question. While the LightSAR program was terminated in the VA/HUD fiscal year 2000 bill, this technology offers great potential for a number of practical applications, most particularly as an all-weather method for remote sensing of the earth's surface. The report to that appropriations bill required NASA to report on the actions NASA can take to support industry-led efforts to develop an operational synthetic aperture capability in the United States. What is the result of NASA's review?

Answer. The Conference Report (House Report 106–379) accompanying H.R. 2684, the fiscal year 2000 VA–HUD and Independent Agencies appropriations bill, directed NASA to review the history of the LightSAR program, and to report to Congress on actions the Agency can undertake to support industry-led efforts to develop an operational synthetic aperture radar (SAR) capability in the United States, with particular focus on NASA as a data customer. The report was submitted to Congress on May 30, 2000. The report indicates:

NASA has technology and scientific interests in Synthetic Aperture Radar (SAR) data, particularly L-band, for its studies of the Earth's surface and interior. We are currently weighing this interest among all others in the context of our Earth Science Enterprise Research Strategy. This plan was recently reviewed by the National Research Council (NRC) and NASA is currently preparing a response to the NRC recommendations.

Commercial interest exists for X-band or C-band SAR data, but the market for such data is not sufficiently mature to justify a commercially-funded mission. NASA is mainly interested in interferometric L-band SAR data for its Solid Earth and Natural Hazards scientific programs. This was demonstrated by the latest and highly successful Shuttle Radar Topography Mission (SRTM). NASA is continuing its investment in SAR technology to reduce the cost of a possible future SAR satellite opportunity. Based on the outcome of the science planning and technology development activities, and our dialogue with stakeholders in government and industry, we will determine the appropriate course of action.

Question. What is the status of NASA's transition to full cost accounting?

Answer. NASA is actively pursuing the implementation of key full cost accounting and related practices. The basic implementation strategy is to phase key full cost practices into Center and Agency operations over the next few years. NASA Centers initiated full cost practices in fiscal year 2000. They are beginning to distribute direct labor costs to projects, and to standardize the structure and content of General and Administrative (G&A) costs and service pool costs across the agency. By the end of fiscal year 2000, NASA plans to decide on fiscal year 2001 full cost activities, depending on progress on fiscal year 2000 activities.

NASA also plans to continue the transition to a "full cost" budget during fiscal year 2002. As part of the transition to a "full cost" budget, the "Mission Support"

account will be distributed to the appropriate activities in the remaining appropriations accounts: Human Space Flight and Science, Aeronautics, and Technology. All program and Agency support and operations will be distributed. The number of appropriations (excluding the Office of the Inspector General appropriation) will thus decrease from three to two.

PROCUREMENT

Question. NASA's procurement obligations accounted for over 87 percent of NASA's total obligations in fiscal year 1998; and NASA procures some $12.5 billion in goods and services annually. In January 1999, GAO identified NASA's contracting management as a high risk area. What is NASA doing to address this?

Answer. NASA's Office of Procurement has taken corrective action on all recommendations issued by the GAO. The GAO has recognized that there are no open recommendations remaining related to NASA's contract management; nonetheless, GAO continued to include contract management on their High Risk list due to the delay in implementing IFMP. However, IFMP is now under review in order to determine how the project will continue. Future plans will be decided this summer, during the fiscal year 2002 budget formulation process.

NASA has adopted a revised procurement measurement system effective November 19, 1998. One new measure—and a key one for tracking results—is that of customer satisfaction. Three electronic surveys were issued to three different groups of customers over the last year. The first survey (of about 4500 NASA procurement office customers) was completed in spring 1999. Approximately 37 percent of those polled responded. Survey results were provided to the NASA Procurement Officers for their review, which will help them improve their organizations' customer service. A follow up survey will be issued to those same customers in June 2000 to assess satisfaction levels in the areas of: effective communication, customer service, meeting mission goals, and procurement knowledge and skills.

We have also collected data from two additional surveys: a survey of the Headquarters procurement office's procurement customers in the field (with a 49 percent response rate), and a survey of the Headquarters procurement office's other customers at Headquarters and Center management. Those survey results have been reviewed at Headquarters and any identified problems are being addressed. It is our intent to issue these surveys annually in the future. The results will be used to improve services to our customers.

Regarding procurement self-assessments, GAO recommended that Headquarters provide the NASA centers with specific Agency-wide guidance regarding the self-assessment process. In a letter dated June 17. 1997, the NASA Associate Administrator for Procurement forwarded to all Center Procurement Officers specific guidance entitled, "Functional Management of Self-Assessments." This guidance is intended for the Center Procurement Officers' use in preparing and submitting annual functional self-assessments. These Center self-assessments are an integral part of the annual certification by the Associate Administrator for Procurement pursuant to Executive Order 12352 to the NASA Administrator that NASA Procurement Systems are adequate. In addition, the Office of Procurement converted the existing Procurement Management Survey Guide, previously used by NASA survey teams which evaluate the quality, effectiveness and efficiency of procurement and grant programs at all NASA Centers, into a Self-Assessment Guide for use by the Centers in performing their own procurement self-assessments. The Self-Assessment Guide was updated in March, 2000. Also, the results of Center self assessments are one of the items reviewed by NASA survey teams in their on-site reviews.

The NASA Office of Procurement has implemented a number of initiatives and innovations to relieve the affects of the Agency downsizing effort. They include the Consolidated Contracting Initiative (CCI), which emphasizes developing contracts, whenever appropriate, that can be used by other procurement offices within NASA and by other government agencies; and using existing contracts to the maximum extent to satisfy Agency requirements. The goals of this initiative are to reduce user time spent on acquisition-related tasks; shorten acquisition lead times, thereby meeting users' needs faster; minimize contract duplication; save money by consolidating requirements; reduce closeout backlogs; and improve cooperation across NASA and with other government agencies. Further, the Office of Procurement has initiated the NASA Contracting Intern Program (NCIP). This is a two-phase recruitment/employment effort. The program consists of a two to three year cooperative education program targeted to college sophomores and juniors followed by a two-year internship beginning at college graduation. It includes an orientation session, formal training courses, and a rotational assignment at a different NASA Center when the co-op graduates into a permanent Intern position. This program was initi-

ated in order to ensure that there are adequate numbers of well-trained procurement professionals whose training and education meet the statutory requirements. This program will be used to fill approximately 30 percent of the anticipated vacancies in NASA procurement Agency-wide.

The NASA Office of Procurement has also initiated a number of contract management initiatives. These innovations include:

Performance-Based Contracting (PBC) which entails structuring all aspects of an acquisition around the purpose of the work to be performed as opposed to how the work is to be performed or broad and imprecise statements of work. It emphasizes the use of quantifiable, measurable performance requirements, and performance quality standards in developing statements of work, selecting contractors determining contract type, structuring incentives, and performing contract administration, including surveillance. The Office of Procurement recently completed a reassessment on the agency-wide PBC implementation in order to ensure that Center procurement offices fully understand how PBC is to be structured for inclusion in NASA contracts. It was determined that the PBC implementation was successful and numerous NASA centers "best practices" were highlighted during the reassessment.

Profit/Fee innovation.—NASA revised its structured approach for determining profit and fee objectives in order to ensure that profit and fee levels are competitive, appropriately motivate "faster, better, cheaper" contract performance, and use a methodology that adequately reflects the realities of today's business environment. NASA's revised structured profit/fee approach uses risk analysis to determine the Agency's objective instead of the former cost element approach.

NASA has established Phase I of a Virtual Procurement Office (VPO). As a result of the explosion of WEB technology and the access to information, the efforts of the NASA Acquisition Internet Service (NAIS) Team in developing a range of tools for the contracting community, and the need to assimilate procurement activities with the Integrated Financial Management Program (IFMP), we have developed the VPO. The VPO assembles in one place on the Internet the myriad of references, tools, and sample documents available to contract specialists. The VPO is designed to organize the rules (FAR, NFS, and local instructions), samples and tools along the familiar lines of the NASA Form 98, "Checklist for Contract Award File Content". The VPO provides a convenient reminder of tasks that need to be accomplished and immediate access to the tools available to accomplish the tasks. Further, it highlights areas such as contract management and financial reporting that may be prime candidates for future development. The response to the VPO concept from all levels of procurement professionals has been very enthusiastic. The VPO has been substantially implemented at all NASA centers. NASA is now evaluating the steps to be accomplished in Phase II which will concentrate on Contract Management functions, procurement data warehouse, electronic filing, etc.

NASA has submitted a proposed rule to the Federal Register that would change the NASA FAR Supplement (NFS) to emphasize considerations of Risk Management, including safety, security, health, export control, and damage to the environment, within the acquisition process. The proposed rule addresses risk management within the context of acquisition planning, selecting sources, choosing contract type, structuring award fee incentives, administering contracts, and conducting contractor surveillance. Additionally, the proposed rule would require offerors to structure their proposals to emphasize risk management, whenever the solicitation requires a technical proposal. Furthermore, the proposed rule would allow that contractors not be paid award fee for any evaluation period in which there is a major breach of safety or security.

Award Term Contracting is a pilot program that will test a non-traditional method of motivating and rewarding contractor performance. The Award Term Contracting (ATC) evaluation and award process itself is directly analogous to the Award Fee process. However, instead of earning fee, a contractor receives periodic performance evaluations and scores, which can result in an extension of the term of the contract in return for excellent performance.

Past Performance of contractors has traditionally been considered by NASA in its formal source selections and is now required by the FAR in competitive procurements over $1 million. A systematic collection of data on past performance for NASA contracts commenced during the third quarter of fiscal year 1998. NASA maintains contractor performance data for all contracts in excess of $100,000 in accordance with Federal Acquisition Regulation (FAR) 42.1502.

COMPUTER HACKING AND TERRORISM: NASA IG, ROBERTA GROSS

Question. The issue of computer terrorism and hacking have become significant security issues to the United States. I know that the NASA IG has made this a priority issue for her office and NASA. However, there remains a huge risk. There was a recent CNN website article that discussed the fact that both Brazil and NASA have been under a wave of online attacks with the result that Brazil's telecommunications regulatory agency was shut down for nearly 6 hours on March 15th. How big a risk to NASA is hacking and other forms of computer terrorism and what kind of risk? For example, could satellites be affected? How about the Space Shuttle or the ISS?

Answer. Response provided by the Office of Inspector General directly to the Subcommittee.

EXPANSION OF THE KECK OBSERVATORY ON MAUNA KEA

Question. I understand the Office of Hawaiian Affairs is considering a lawsuit to block the expansion of the Keck Observatory on Mauna Kea. Hawaii, because of religious concerns. In this case, Native Hawaiians consider the summit of Mauna Kea a sacred religious site. How does NASA plan to deal with these very sensitive local concerns.

Answer. The Keck Interferometer is a key element in NASA's Origins Program, a program to search for life in the universe. The Keck Interferometer is an important component of the program because it will provide data necessary for the design for the Terrestrial Planet Finder (TPF) mission, a key element of the Origins Program. The objective of TPF is to search for, and identify habitable planets, like our own Earth, orbiting nearby stars.

The site at Mauna Kea is uniquely suited to demonstrating optical synthesis imaging necessary for the design and development of TPF for a number of reasons. First of all, the site already houses the two very powerful 10-meter Keck telescopes. Combined with the proposed four outrigger 1.8-meter telescopes, the configuration will yield an interferometric array with 15 different baselines that have lengths of up to 140 meters and angular resolution 10 times better than each of the Keck telescopes alone. This combined array will be used for both imaging of scientific objects and for advancing the development of synthesis imaging.

Another very important facet is the fact that the atmosphere at Mauna Kea is extremely dry and stable. This provides for a very simple and straightforward atmospheric correction scheme for each outrigger telescope.

While NASA has not done a formal study of alternate sites, it has given consideration to several possibilities. Unfortunately, none of them have the advantages that Mauna Kea does. Alternative locations would require building 6 telescopes instead of 4, and they would have to be outfitted with additional optical systems to compensate for the poorer atmosphere. This would add significant cost to the project and would also delay the return of scientific results.

NASA officials, in coordination with staff of the W. M. Keck Observatory and the Institute for Astronomy, had a series of meetings this March with representatives of various Hawaiian entities. They met with several representatives of the State of Hawaii (including Dr. Don Hibbard of the Historic Preservation Division), interested Native Hawaiian community groups, and Senator Daniel Inouye's Hilo field representative, Mr. William Kickuchi. These consultations were part of an effort by NASA to understand the concerns of the Native Hawaiian groups and to determine if NASA might be of assistance in undertaking prudent mitigation measures that would address concerns related to NASA's proposed outrigger telescopes project. The information obtained from these meetings will be used to develop a draft mitigation plan. Upon completion of the draft mitigation plan, NASA will provide a copy to each of these entities in late June and be prepared to discuss its contents. They will have a 30-day review period. After we receive their comments, we anticipate having another consultation meeting to resolve any outstanding issues.

BOEING BUSINESS JET

Question. NASA is looking to acquire a business jet that would provide international emergency medical facilities. This seems a *Question.*able acquisition for activities that can currently be performed by the US Military if necessary. I understand that this would be paid for by the Japanese as part of a swap which means that it is not really free and there would be additional operational costs. I need more information, but I would like a commitment if NASA goes forward that this plane would be used solely for medical emergency uses and not passenger use.

Also, it has been suggested that NASA could contract for aircraft needs through private airline companies and time-share contracting. I understand that NASA has been looking at this issue and I would appreciate a summary of the pros and cons, including a cost analysis.

Answer. The International Space Station (ISS) Program has a requirement to provide emergency medical response to safeguard the well being of astronauts in the event of an unplanned return to Earth of the ISS crew members. A worldwide rapid response capability is needed to achieve this. Additionally, the stabilization of long duration crewmembers after such an emergency return requires special medical equipment and medical personnel specially trained to this specific discipline. NASA is exploring numerous options to meet this need including the DOD and private sectors. NASA has been unable to identify any organization that could respond in a reasonable time-frame with the proper equipment or with personnel trained to deal with issues associated with long-duration space flight. The DOD Medevac mission has requirements, which are fundamentally different from NASA's. NASA's preferred solution at this time, is to obtain a specially outfitted, extended-range Boeing 737 aircraft. Should NASA pursue this option, the aircraft would not be used to carry passengers for administrative purposes. NASA is beginning to assess options for how to acquire such an aircraft, and one of the preliminary options under consideration is a potential barter arrangement with Japan.

NASA is assessing options for contracting for aircraft needs through private airline companies and time-share contracting, and will provide a summary when the assessment is complete.

LANDSAT 7

Question. Landsat, as the world's first civil earth-observation satellite program, has provided us with a continuous stream of land-image data since 1972, and with Landsat 7, launched in April 1999, we have begun to collect and process seasonal global data sets of land image data. The management of Landsat 7 is currently the responsibility of the U.S. Geological Survey under a multi-agency memorandum of understanding. Does the USGS have financial responsibility for this program and to what extent? Can this be a model for future agreements between agencies?

Answer. As a result of an interagency agreement between the USGS, NASA, and NOAA, signed in November, 1998, the USGS has been designated to be the operational agency for the Landsat Program. Financial responsibility for the Program in fiscal year 2000 is shared by NASA and the USGS.

The USGS funds operation of the Landsat 7 ground data collection system (receiving, preprocessing, and permanently archiving Landsat 7 images) from a combination of USGS appropriations and fees received for transmitting Landsat 7 data directly to international cooperator ground receiving facilities. The USGS also has funding responsibility for product generation and distribution, and supports this activity through income derived from product sales, with products distributed at cost of reproduction.

NASA is funding fiscal year 2000 costs for operating the Landsat 7 satellite and management of ground receiving stations in Alaska and Norway (shared facilities supporting other NASA missions). In fiscal year 2001, the responsibility for funding and managing Landsat 7 satellite flight operations will transfer in its entirety to the USGS, pending final signature of the revised Presidential Decision Directive, and receipt of fiscal year 2001 support of Landsat 7 flight operations.

This transition should serve as a model for such activities in the future. We believe this is an excellent model for transitioning a key capability from a research and development agency (NASA) to an operational agency (USGS) with the mandate for obtaining and preserving long term records of change.

Question. Please identify all current projects with a projected total cost of the missions that exceed $50 million that are currently (or expected to be in fiscal year 2000) in excess of their annual or total budget by 15 percent. Please identify the status of the mission, the reasons for the cost overruns, the process in place for reviewing the cost overruns, and the status of each mission in the process, and the criteria that will be used to determine whether a mission will be continued or terminated.

Answer. There are currently 4 projects over $50 million that exceed their total budget by 15 percent, three of which are within the Earth Science Enterprise and one in the Space Science Enterprise. These projects have experienced cost growth and schedule delays for a variety of reasons including technical problems, increased reviews and emphasis on risk reduction, and, in one case, Congressionally-driven changes in requirements. The NASA Procedures and Guidelines (NPG)—NPG7120.5A Program and Project Management Processes and Requirements set

forth the internal Agency review process for reviewing program, technical, cost, and schedule performance.

The NPG requires that a special purpose review be called to assess continuation of a project or mission that is projected to be unable to meet its commitments. A review is conducted by the appropriate Center Program Management Council when any project exceeds or is projected to exceed by more than 10 percent the total development run-out cost identified at Mission Confirmation Review (MCR) or its equivalent, exceeds or is projected to exceed the NASA mission cost cap identified at MCR or its equivalent, delays or is projected to delay launch readiness by 15 percent (based on time frame between MCR or its equivalent and Launch Readiness Date as defined at MCR or its equivalent), or fails to meet minimum success criteria as defined by Level I Requirements.

In these reviews, NASA typically considers science benefit, availability of funding to address shortfalls, existing program risks, and all other relevant factors in determining whether to terminate or continue the mission under review. Findings are submitted to the Associate Administrator (AA) for review. The review recommends either continuation or termination of the mission. The AA then, in turn, submits termination or continuation recommendations to the Administrator.

The following is the requested information about the specific projects and missions that exceeded the budget/cost thresholds referenced in the Question:

(1) *Earth Observing (EO–1)*.—EO–1 is a technology demonstration mission to validate in space new earth imaging technologies considered vital for future science and Land Remote Sensing. EO–1 experienced a failure in the power converter of the Wide Band Advanced Recorder-Processor (WARP) in early January 2000 which was caused by contamination of a wire bond in a hybrid reference diode. Because of its original intermittent nature, the failure was difficult to trace but it was eventually found to be caused by a random manufacturing defect. This issue can be resolved by replacing the power converter. ESE management tracked the cost and schedule impacts associated with this failure and other technical issues. When final cost projections showed cost growth sufficient to trigger a termination review, management discussions were held to decide whether to proceed with such a review. ESE decided not to press for a termination review based on the following factors:

—The spacecraft appeared technically sound despite the random manufacturing defect problem and the fact this was a "higher risk" technology demonstration.

—ESE management successfully tracked the evolution of the problem so there was little new information a termination review was likely to provide.

—Since the agency had required a Red Team Review for all CY2000 launch missions, ESE felt this would be a meaningful venue to assess the technical readiness of EO–1 for launch.

—While the programmatic funding adjustments needed to cover the EO–1 cost growth were difficult, they could be managed within the New Millennium Program.

The value of the technology to NASA, as well as the increased management oversight, was the basis for continuing this technology development effort. Despite the technical problems and additional testing recommended by independent reviewers, corrective actions are underway and the satellite is on target for launch in October 2000.

(2) *Vegetation Canopy Lidar (VCL) Project*.—VCL experienced development problems and schedule slips because of its Multi-Beam Laser Altimeter (MBLA) instrument. The instrument failed to achieve performance requirements. An independent review team recently identified ongoing technology issues and made recommendations to mitigate risk in areas such as laser performance, contamination control, and testing methodology. The independent review team developed recommendations relative to continuation of the mission. The Goddard Space Flight Center Program Management Council (PMC) conducted a Termination Review of VCL and generated a series of options for continuation. The NASA Headquarters Program Management Council also conducted a review of VCL on June 22 to weigh options for continuation or termination, resulting in an action to refine the options. A second meeting is scheduled for early August, after which a decision will be taken on the future of the mission.

(3) *Triana*.—The Triana satellite mission presented a special case. The Conference Report (House Report 106–379) accompanying H.R. 2684, the fiscal year 2000 VA–HUD-Independent Agencies appropriations bill, included direction for NASA to suspend all work on the development of the Triana program until the National Academy of Sciences (NAS) completed an evaluation of the scientific goals of the program. Consequently, in October 1999, NASA suspended work on the Triana Project. This "stand-down" lasted five months. In March 2000, the NAS released its report that determined Triana's science was substantial and achievable. As a result of this

review, NASA is implementing recommendations to increase instrument testing and calibration, as well as to increase the development and testing of data reduction algorithms. These additional requirements, as well as the required stand-down while the review took place and the final structure of a partnership with Italy, have resulted in cost growth and schedule slips. NASA did not subject Triana to a formal Termination Review because the delays and cost growth were largely externally driven. However, over the past several months, the Agency has conducted several reviews of the restart plan for Triana, and, in each case, the outcome was a recommendation to proceed with the program. In April, the GSFC Program Management Council (PMC) reviewed the Triana restart plan. In addition, the GSFC PMC chartered an independent review of Triana, which was conducted in May. Most recently, at the end of June, the GSFC reported its restart plan to complete Triana to the Headquarters PMC and received a recommendation to continue. Currently, spacecraft integration and testing is underway and instruments are ready for integration into the spacecraft.

(4) *Gravity Probe B*.—Failed its science instrument functional tests last year, due primarily to thermal and gyroscope problems. As a result the science payload had to be disassembled and design modifications had to be made. The technical solutions are in work, and the project is currently on track for starting integrated payload testing in mid-September 2000, with a plan to initiate full space vehicle testing in September 2001, pointing toward a projected launch in May 2002. We are aware that new issues could surface as a result of the design modifications that are being made. A Headquarters-controlled near term (April 2000–April 2001) critical milestone schedule is in place for GP–B. We are closely monitoring the progress made toward these milestones. Failure to meet this milestone schedule may result in a termination review by NASA's Program Management Council (PMC).

QUESTIONS SUBMITTED BY SENATOR TED STEVENS

HUBBLE SPACE TELESCOPE SERVICING MISSION COSTS

Question. The Conferees provided $23 million in order to address the critical shortfalls in the HST program due to the initial unavailability of the Columbia Orbiter for the third servicing mission and the subsequent decision to split this servicing mission into two parts. Following this action, we understand that the Shuttle Fleet was down for wiring inspections and SM3A slipped until December.

What is the total cost of Shuttle impacts on HST in fiscal year 20OO and the next five years?

Answer. The additional $23 million provided by the Conferees was sufficient to cover the additional near-term costs from the split of SM3 into two parts, and related Shuttle impacts. The slip of SM3A from October into December 1999 was absorbed by reserves included in the $23M estimate.

There is a $44 million additional out-year cost associated with the new HST servicing mission schedule. Sufficient time must be maintained between servicing missions to enable the workforce to complete necessary planning activities. In order to maintain a reasonable amount of time between SM3B and SM4, we delayed the planned launch of SM4 by about six months, until summer of 2003. The slip of SM4 means that we must maintain the Hubble servicing workforce for an additional 6 months, increasing the HST budget requirement by $44 million in fiscal year 2003, with no changes necessary in other fiscal years.

Question. How are these being addressed? Please provide a year by year summary of impacts, including impacts on Goddard and contractors.

Answer. The $44 million impact in fiscal year 2003 was addressed during our out-year budget planning last summer by transferring funds from NGST in fiscal year 2003. There is a strong link between the HST and NGST programs, both scientifically and in their budgets. The two programs essentially "share" a given level of funding in the budget; thus increases in the requirements of one will force a reduction in funding for the other. Per this arrangement, as NGST progresses through the development phases in coming years, the ramp up in its budget will be largely offset by the significant ramping down in HST following SM4. The $44 million taken from NGST in fiscal year 2003 had no significant impact to the NGST program (either contractors or civil servants), since schedule slips driven by technology readiness and other issues have slowed the NGST ramp-up, making these funds available for HST.

Despite this slip, NGST remains a very high priority within Space Science, in accordance with the new Decadal Survey report from the National Research Council.

This report maps out the priority investments in astronomy research over the next decade, and gave the highest priority to NGST.

Question. What is the status of the $40 million AO for ATD that was issued in 1999? How many proposals were submitted in response to this competitive solicitation and how many will be selected?

Answer. Evaluation of the proposals to the $40M cross-cutting engineering technology development (CETD) AO (actually a NASA Research Announcement or NRA) was completed in late August. Thirty-nine panels composed of independent reviewers from NASA, other government agencies, and universities reviewed the 1,229 proposals submitted. Final selection is expected to occur in mid-September 2000. The average proposal is for $1.2 M over a three-year performance period, meaning that approximately 100 of the proposals will be selected within the $40M budget.

Question. What plans does NASA have to continue this competitive process in the future? With fiscal year 2000 funds? With fiscal year 2001 funds?

Answer. It has always been NASA's policy to solicit the best ideas, and NASA plans to continue the competitive CETD NRA program. With few exceptions, proposals received are for a three-year performance period but will be reviewed for performance annually. New solicitations will occur as funds roll over from completed existing and future projects.

Question. Would the Agency consider expansion of future AO's to include mid-level technology readiness levels (TRLs), as opposed to just early TRLs?

Answer. NASA considers the proactive transition of promising low-TRL technologies to higher levels of application to be a critical aspect of technology development and has a number of strategic programs for that important purpose, such as the openly competed New Millennium Flight Experiment Program. NASA has long recognized the need to continue the development of promising low TRL technologies developed under its AO processes. It also recognizes the potentially huge benefits of adapting low TRL technologies developed elsewhere for use on NASA missions. Unfortunately, as technologies move up to higher maturity level, the amount of resources required to continue their development increases, a factor that limits the number of technologies that can be funded within a constrained budget. Developing new strategies for accomplishing the low-to-mid TRL transition process continuous within the Cross-Enterprise program is a part of on-going planning activities.

Question. The Agency has changed its position over the last several years about its support for the Committee's directives in fiscal year 1998, 1999 and 2000 to compete 75 percent of all ATD funds, both focused and core program elements. What is the Agency's current position on this directive and schedule for plans to implement it fully?

Answer. NASA has two requirements from Congress: (1) compete 75 percent of all ATD programs and (2) preserve center core competencies for technology development to support future missions. These requirements are not independent. NASA's technology core competencies are embodied in a group of technologists with in-depth knowledge and skills as to the possibilities, limits, and state of readiness of technology critical to NASA's missions. Examples are aerodynamics/aerothermodynamics, space power, microelectronics, advanced materials and structures, and robotic spacecraft. These technologists work closely with university and industry technologists and mission developers to provide system and mission level integration of disparate technologies. For example, a space-materials technologist understands the space-related value and problems of adapting a promising generic nanotechnology material developed by a competitively selected physical chemist who has no space background. The establishment of firm center core competency requirements is currently in progress under the direction of the Chief Technologist and involves about 35 technologies over the nine NASA centers and the Jet Propulsion Laboratory. An implementation strategy that integrates ATD core competencies with complementary competed ATD programs will follow. NASA believes that competed programs should not put the necessary NASA core competency personnel in conflict with potential government partners in universities and industry in the competitive proposal process. This belief is based on long experience in working with the external community to develop ideas to a useful state. It was underscored by the experience of the recent CETD NRA where competitive conflicts impeded the willingness of technology suppliers to communicate openly in matters not related to the NRA for fear of disclosing new technologies in discussions of applications other than the specific ones being proposed competitively. Beneficial information exchange that enables NASA to plan future technology dependent missions and to evaluate the benefits and risks of new technologies in combination with other mission factors and technologies, i.e. be a smart buyer, are compromised. An approach that enables NASA technologists to retain working relationships with all potential bidders in a

full and open competition, without compromising internal cutting-edge knowledge and skills, is a crucial part of this strategy.

Question. Please provide a detailed breakdown of the uses of all "Core Program" ATD funds (which totals roughly $800–900 million) for the last four years (fiscal year 1997–2000) by subprogram element, technology readiness level classification, project, contract and NASA center?

Answer. The last four years total (fiscal year 1997–2000) for the Core Program is $843M. The subprogram elements that fall under Core Program consist of:

[In millions of dollars]

Intelligent Systems	18
Information Systems	90
Advanced RTG	3
R&A Instrument Development	36
Remote-Exploration & Experimentation (RE&E)	37
Explorer Program Technology	13
Planetary Flight Support	36
Other OSS Core Technology	55
Cross Enterprise Technology	555

Technology readiness level (TRL) classification for the "Core Program" ranges from 1 through 9. Below is the breakout by each program element.

Program Element	*TRL*
Intelligent Systems	1–6
Information Systems	5–8
Advanced RTG	3–5
R&A Instrument Development	5–8
Remote-Exploration & Experimentation (RE&E)	4–6
Explorer Program Technology	4–7
Planetary Flight Support	7–9
Other OSS Core Technology	1–6
Cross Enterprise Technology	1–4

Please note that very little ATD work is being done within the Information Systems and Planetary Flight Support elements. Any ATD work that is being done within these two projects is technology upgrade and improvement.

Within the Core Program NASA spends approximately 45 percent at the NASA centers (JPL is included) and 55 percent is contracted out via contracts, grants and inter-agency transfers.

Question. How many civil servant and/or contract employees (e.g. JPL) are supported with these "Core Program" funds either through direct salary or program support? How many NASA Center-based technology labs are comparably supported with these?

Answer. On an annual year basis the Core Program funds support approximately 500–550 civil servants and 700–750 contracted employees; JPL is considered as contracted employees.

The "Core Program" funds support seven NASA centers (GSFC, GRC, LaRC, ARC, JSC, JPL, MSFC).

Question. How are projects evaluated for funding with the Core Programs, including life cycle costs analysis? Who makes the decision to fund individual projects and tasks?

Answer. For purposes of this response, we are interpreting "Core Programs" to mean those Space Science missions selected via the strategic planning process, rather than missions selected through the Discovery or Explorer process.

The evaluation and funding of Space Science programs is done with a great deal of input from the outside science community. NASA involves groups like the National Academy of Sciences/Space Studies Board; the NASA Advisory Council; the Space Science Advisory Committee and its subcommittees; and representatives from academia, industry, and other government agencies in determining science priorities. These are laid out in the Space Science Strategic Plan, which is published every three years. Once these science priorities have been identified, detailed studies of mission concepts to carry out the science objectives are conducted. The results are presented back to the science community for prioritization. A number of factors are taken into consideration during this process. Among these are cost, technology readiness, launch vehicle availability, schedule, etc. So there is not one single factor that determines the fund/don't fund decision. With considerable input from the science community, selections are made by senior space science officials at NASA Headquarters.

Question. Are there plans to change the management of the Core Programs line from Code S (space science) to Code R (aeronautics and space technology)? If so, can you explain the rationale for this and which funds identified in the budget justification on page SAT 1–49 are affected, and why this change was not included in the budget request for 2001? When will a reprogramming/reorganization notice be submitted to the, Committee to request permission to make this change?

Answer. The movement of the oversight of a part of the Core Programs line from Code S to Code R in fiscal year 2001 is in progress as a part of integrating the Office of the Chief Technologist and the Office of Aerospace Technology. The rationale is to concentrate, under Code R, the early development of technologies that will eventually apply to many missions in multiple enterprises. The current program is being reviewed by Code R, and it is envisioned that programmatic changes may occur in addition to the recent management change. Final recommendations on specific changes will be identified after selection of the NRA winning proposals and evaluation of their contribution to the total needs for NASA technology. Any significant changes to the program will be communicated to the Committee via the Agency fiscal year 2001 Operating Plan following OMB approval.

Question. Please provide the Committee with a detailed breakout by proposed flight or strategic initiative (including specific funding centers) by fiscal year for the period of fiscal year 1998—2005 of all "Focused Program" ATD funds, beyond the level of detail displayed on page SAT 1–55156. For example, Deep Space Systems for fiscal year 2001 has $181 million request, yet only $112 million is identified in detail.

Answer.

	Fiscal years—							
	1998	1999	2000	2001	2002	2003	2004	2005
Origins (SIM, NGST, KECK, TPF)	77.1	92.2	131.2	133.2	186.9	295.3	482.5	449.8
SIM	34.2	31.2	40.9	48.0	95.0	136.3	182.6	142.8
NGST	20.1	32.2	46.6	61.5	55.4	66.6	209.5	223.5
TPF	0.4	1.6	4.0	10.0	13.0	19.0	21.0	42.0
KECK INTERFEROMETER	9.5	16.4	13.7	6.4	6.4	7.5	7.8	8.5
ST–3/FLIGHT DEMO	.....	9.2	8.0	17.0	32.0	57.0	51.0	22.0
FUTURE ORIGINS	12.9	1.6	18.0	−9.7	−14.9	8.9	10.6	11.0
Deep Space System (Europa & Pluto)	51.5	97.1	162.2	181.8	227.1	218.1	212.7	267.1
EUROPA ORBITER	2.9	15.4	57.3	93.0	101.2	56.7	31.6	31.4
CISM	8.5	4.9	8.7	10.9	13.1	13.9	14.5	14.8
Advanced RTG	9.7	9.7	9.6	9.6	8.6	8.6	9.6	9.8
PLUTO/KUIPER	1.0	0.7	7.0	19.6	61.2	72.4	65.2	34.1
Deep Space-4 closeout	.....	11.4	.....	.....	.....	.....	.....	.....
X–2000	15.2	38.4	65.6	49.8	28.3	27.0	39.9	40.7
Future Deep Space Missions	14.2	16.6	14.0	−1.1	14.7	39.5	51.9	136.3
Search for Evolution & Universe (SEU)	18.7	14.6	22.9	31.5	45.9	106.0	125.9	127.3
FIRST	9.5	6.7	16.1	20.8	18.1	16.0	9.8	4.1
GLAST	3.3	4.8	4.9	8.7	22.5	84.3	93.5	44.3
Future SEU Missions	5.9	3.1	1.9	2.0	5.3	5.7	22.6	78.9
Sun-Earth-Connections (SEC)	7.9	20.2	26.6	78.0	160.8	240.9	310.7	448.3
Solar-B	0.8	5.0	9.6	19.5	23.3	10.6	7.2	10.3
Stereo	3.4	7.0	8.3	23.6	54.0	73.7	64.6	22.8
Solar Probe	1.9	0.4	3.2	7.4	13.9	16.0	45.4	98.3
Living With a Star	.....	.....	.....	20.0	64.0	117.0	133.0	177.0
Future Solar-Terrestrial Probes	1.8	7.8	5.5	7.5	5.6	23.6	60.5	139.9

The budget estimates as identified above represent total funding for the projects/program lifecycle (ATD, mission studies and pre-project planning, development, launch, and mission operations and data analysis) cost. The budget numbers as identified above are consistent with the fiscal year 2001 President's budget.

Note that all unresolved shortfalls, currently carried in the "Future Missions" lines, will be resolved during the preparation of the fiscal year 2002 budget. This activity is currently underway, with each project's performance and progress during this year being used to revise future plans, schedules, and funding requirements. Resources will be reallocated to minimize the impact across the entire Space Science Enterprise, in accordance with the priorities established in the NASA and Space Science strategic plans.

Question. For all flight projects or strategic initiatives (including funding centers) broken out in response to the previous question, please provide the full life cycle costs (including full multi-year projections) for ATD phase of these activities and the number of NASA employees (including JPL) working on each project or initiatives.

Answer. Current life-cycle budget estimates for flight missions that are currently being funded within the "Focused Program" are as follow:

[In millions of dollars]

Selected Flight Mission	*Life-cycle cost (Real Year $)*
SIM	1,030
NGST	1,700
TPF	2,100
ST–3	220
Europe Orbiter	450
Pluto/Kuiper	350
FIRST	190
GLAST	330
Solar-B	160
STEREO	320
Solar Probe	360

Please note that the estimates identified above represent current assumptions, in many cases based on initial mission concepts that may vary considerably from the design that eventually flies many years from now. As a result, these numbers may change as the missions move from early formulation to the start of the implementation phase, where the mission design, technologies and development schedules are defined sufficiently to provide accurate estimates for full-scale development. It is at that point, just before the beginning of implementation, that NASA will carry out a detailed non-advocate review of these projects, and will establish a baseline cost estimate.

The number of NASA employees (including JPL) working on each project or initiatives varies from year to year, and they are as follows:

Project	*# NASA employees (JPL included)*
SIM	85–110
NGST	110–150
TPF	3–150
KECK INTERFEROMETER	10–20
ST–3/FLIGHT DEMO	10–55
EUROPA ORBITER	46–142
CISM	19–34
Advanced RTG	6
PLUTO/KUIPER	4–13
X–2000	73–155
FIRST	5–29
GLAST	12–30
Solar-B	4–11
STEREO	5–15
Solar Probe	1–17
Living With a Star	27–80

Also note that the number of NASA employees as identified above will change as projects or initiatives move through the formulation and implementation phases.

MARS

Question. The five-year budget project estimates that almost $2 billion (see Page SI–20) will be spent on the Mars program. Please breakout by activity, including advanced technology development and launch vehicle costs, how funds in the Mars Surveyor program have been spent to date (approximately $1.1 billion through fiscal year 2000).

Answer. During the five-year (fiscal year 1995–fiscal year 2000) period, NASA has spent

—$730M for the planning and development of the spacecraft and instruments for the Mars Global Surveyor (MGS), Mars 98 Orbiter & Lander, and Mars 01 mission.

—$205M for launch vehicles for the MGS, Mars 98 Orbiter & Lander, and Mars 01 missions.

—$70M for Mission Operations & Data Analysis.

—$60M for advanced technology development.

Question. Please indicate how funds spent on the Mars program in the future will be competed to permit greater outside support for it, including at academic labs and research universities?

Answer. As with all of the past missions, the scientific research on each future Mars Surveyor mission will come from competitively selected payloads. The 2003 mission will fly the Athena rover package that was competitively selected to fly on the cancelled 2001 lander mission. All missions beyond 2003 will select science payloads on a competitive basis, with proposals solicited from all scientific sources. The selected proposals will be integrated into each mission.

Moreover, during the ongoing Mars program re-planning process we are also considering the addition of a relatively large number of smaller science and technology missions. Payloads, technologies, and possibly entire spacecraft for these missions will also be selected utilizing a competitive process similar to that used in NASA's Discovery Program. In addition, the future Mars program is studying adoption of an outreach strategy with Industry, Academia, NASA centers and other Government facilities that have not traditionally played a major role in the program.

Question. Prior to the latest mishaps, the Committee understands that the "research and analysis" portion of the Mars program was severely underfunded, to the tune of only a few percent of the program's total costs, compared with the community average of no less than 10 percent. How will future Mars activities correct this serious shortcoming?

Answer. An analysis on the existing Mars Program indicates that NASA is spending about 10 percent per year on Mars research and analysis. Although comparable to other missions, NASA plans on a new philosophy for funding Mars research and analysis, in which each Mars mission will have sufficient science funding. Mission requirements will be the driver of the budget allocation rather than an arbitrary "fit-in-the box" allocation.

Question. What role is the extramural planetary research community playing in shaping the future Mars program? Please provide the Committee with some examples.

Answer. NASA's Space Science Enterprise is openly considering all facets of its Mars Exploration Program starting with the 2005 opportunity and carrying through 10 to 20 years. In order to cast a wide net for capturing ideas and potential participants for missions, mission elements, and experiments that fit within the broadly defined scope of this program, NASA is sponsoring a two and half day workshop to be held at the Lunar and Planetary Institute (LPI). The workshop is specifically dedicated to the extramural community, i.e. open to scientists, engineers, and other colleagues from academia, Federal Laboratories and industry. The intent of the workshop is to provide an open forum for presentation, discussion, and consideration of various concepts, options, and innovations associated with a strategy for Mars exploration that calls for "following the water" strategy that is central to the "quest for life" on Mars.

In addition to the workshop we are reaching out to the Industry for their ideas and concepts via a Request For Information (RFI).

Other extramural planetary research communities that also play a role in shaping the future mars program include:

—The National Academy of Sciences, Space Science Board, Subcommittee on Planetary Exploration (COMPLEX)

—Space Science Advisory Committee (SSAC)

—Solar System Exploration Subcommittee (SSES)

—Mars Advisory Science Team (MAST)

—Mars Exploration Program Advisory Group (MEPAG)

Question. Last year Agency provided the Committee with a consolidated resource schedule for SOMO by account and program element with a total SOMO budget of $715 million. Please provide a comparable chart for the three year fiscal period (1999–2001) based on the 2000 operating plan and the 2001 budget submission, breaking out each program element activity dollars by sub-program element, project, contract (e.g., CSOC, TMOD or other) and NASA field center.

Answer. The table below represents the Consolidated SOMO Resources Schedule information available from the fiscal year 2001 NASA budget formulation.

FY 2001 NASA Budget
Consolidated SOMO Resources Schedule

Appropriation Account	Enterprise	Centers	Major Contractor	Dollar in Millions FY99 $*	FY00 $	FY01 $
Total				$ 680.2	$ 673.6	$ 719.5
Science, Aeronautics & Technology						
Space Science	SS	GSFC, JPL	Lockheed-Martin (CSOC)	$ 7.5	$ 10.0	$ 10.0
Earth Sciece	ES	GSFC, JPL	Lockheed-Martin (CSOC)	$ 16.9	$ 28.5	$ 31.3
Aeronautics	AST	GSFC, MSFC, DFRC, ARC	Lockheed-Martin (CSOC)	$ 0.7	$ 0.5	$ 0.5
*Mission Communications Services***	HEDS	GSFC, JPL, GRC, DFRC	Lockheed-Martin (CSOC), Hughes, Lockheed-Martin (non-CSOC), Australian and Spain Overseas Sites	$ 380.0	$ 406.3	$ 529.4
International Space Station						
Space Station	HEDS	JSC	Lockheed-Martin (CSOC)	$ 18.7	$ 52.6	$ 63.7
Launch Vehicle and Payload Operations						
Space Shuttle	HEDS	JSC	Lockheed-Martin (CSOC)	$ 24.7	$ 43.0	$ 41.6
Mission Support						
*Space Communications Services***	HEDS	GSFC, MSFC, KSC	Lockheed-Martin (CSOC), CSC	$ 185.8	$ 89.7	
Reimbursable Offset						
Other Agencies		GSFC	Lockheed-Martin (CSOC)	$ 45.9	$ 43.0	$ 43.0
Civil Service FTE ***				358	281	271

* FY 1999 reflects a 9-month effort for CSOC (Contract full up is January 1, 1999)
** Symbolizes separately identified in NASA's budget
*** Civil Service FTE for Mission Communications Services and Space Communications Services only

Question. The recent report on TMOD to the Congress identifies TMOD's budget as roughly $188 million per year. The budget justification, at page SAT 6–1 identifies JPL's allocation of fiscal year 2001 space operations budget as $131.1 million. Please provide a cost analysis of this difference by program element and project activity, identifying all fund sources in detail for the estimate provided in the $188 million figure.

Answer. The table below is a cost breakdown that reconciles the $188 Million in the TMOD report to the $131 Million in the NASA Budget narrative.

Program Area	Mgmt/funding	TMOD report	SAT 6–1
Cassini	Space Science	$41.2	.....
Galileo	Space Science	3.6	.....
SVLBI	Space Science	3.3	.....
Ulysses	Space Science	4.3	.....
Voyager	Space Science	4.6	.....
DSMS/AMMOS	Space Science	37.6	.....
DSMS/DSN	SOMO	94.0	$94.0
Ka-Band upgrade	SOMO	.....	12.2
Overseas sites	SOMO	.....	24.9
Total		188.6	131.1

The bases of estimate in the TMOD report falls into two categories, Flight Projects and Deep Space Mission System (DSMS). The flight project cost estimates reflect JPL's commitment to deliver science products to the projects. The TMOD report reflects two different sources of funding and content as shown that is different from the SAT report. The SAT report includes other content (Ka-Band Upgrade) that was not in place at the writing of the TMOD report.

Question. The TMOD report also suggests that much of TMOD's works is R&D activity instead of true operations. Please indicate in detail (by program element, mission and project) what portions of the TMOD/JPL space operations budget fi-

nance "operations" and what portion finances "R&D", explaining the differentiation between the two.

Answer.

[In millions of dollars]

Operations (CSOC)	56
Operations (Non-CSOC)	44
Systems Development	73
Research & Technology	71
TMOD Report Total	188
Total budget estimate for fiscal year 2001	244

Programmatic responsibilities for TMOD include telecommunications, mission operations, ground-based radio astronomy, solar system radar, radio science observation, and management of assigned flight projects.

Operations support is provided through the CSOC contractor, Lockheed-Martin, and other contractors.

Research and Development tasks enable the conduct of on-going and new missions by the NASA strategic enterprises. The funds support the continuing advance and upgrade of the DSN and Advanced Multimission Operations System (AMMOS), including increased telecommunications performance and addition of new services and tools. Together, the DSN and AMMOS comprise the Deep Space Mission System (DSMS) that supports deep space missions. R&D funding also incorporates the science investigations for Voyager, Ulysses, Galileo, Cassini, Space VLBI, and the technology initiatives that benefit future communication requirements and reduce operational costs.

Question. How many "research and development" projects or components were initiated, and over what time period, to create the Deep Space Mission System. Please identify each project, how much was spent per year, the JPL FTEs dedicated to each, the status of each project, and how each project's final cost compared to the estimate made at the start of each project.

Answer. Deep Space Mission System (DSMS) is the name of the program within the TMOD responsible for the Deep Space Network (DSN) and the Advanced Multi-Mission Operations System (AMMOS). DSN systems implementation began in 1957, with the first antenna operational in 1958. The DSN systems implementation is currently managed and funded by Office of Space Flight. The AMMOS concept began in the 1960's, and its evolution is managed and funded by the Office of Space Science.

System evolution and upgrade projects to date for the DSN and AMMOS systems, collectively known as the DSMS, are numerous. Project historical records are not readily available at a detailed level due to the longevity of the program.

The program content over the years was determined based on program priority and technical merit. Please refer to question number 21 for current upgrade initiatives.

Question. Please identify each project, and amounts allocated by fiscal years 1999, 2000 and 2001, in the Deep Space Network mission and data services upgrades line. Page SAT 6–12 says that the Network Control Project was mostly completed in 1999. Please provide the original cost estimate for NCP and the cost at the project's completion. Please account for any changes.

Answer. The matrix below is a list of current tasks.

Major DSN Upgrade Project Plans	Prior Years	Fiscal years—	
		2000	2001
Network Simplification Project (Includes completion of the Network Control Project)	$16.4	$10.4	$5.4
Cassini Radio Science Ground System	9.2	6.4	1.9
Frequency and Timing Subsystem Monitor and Control	0.8	0.9	0.9
Beam Wave Guide Ka-Band Upgrades	2.0	5.1	9.7
70-Meter X-Band Uplink	10.3	3.3	1.7
Antenna Renewal	3.1	1.0	5.3
26-Meter Automation	1.6	0.8	.....
DSS–26 Electronics	3.9	2.5	0.3
Turbo Decoder	0.5	1.0	0.5
Maser Replacement	1.0	0.5	.....

Major DSN Upgrade Project Plans	Prior Years	Fiscal years—	
		2000	2001
Enhanced Reliable Network Service	.....	1.3	0.4
Total	48.8	33.2	26.1

The objective of the Network Control Project (NCP) is to infuse industry developed monitor and control technology into the DSN infrastructure and to reduce operational costs. NCP represents an evolution and combination of several tasks over a number of years. With this history, it is difficult to precisely define an original cost. However, it is estimated that the final cost is about $50M including approximately $10M growth. The growth was primarily due to recovering from the use of Commercially available but not-yet-sufficiently-mature technology used for one component of NCP.

Question. What is NASA's level of confidence in the NCP and its ability to deliver the capabilities originally promised at the project's beginning?

Answer. NASA is very confident that the intended NSP capabilities will be delivered with the exception of a Network Planning and Preparation subsystem. This subsystem was eliminated in fiscal year 1999 to obtain resources needed to ensure Y2K compliance. An equivalent, low cost approach to the NPP function was implemented by upgrading the subsystem which the NPP was intended to replace.

The initial delivery of NCP was completed in late 1999. This delivery provided a basic implementation of all the remaining capabilities and is being operated in parallel with the legacy system at the DSN complexes for training and evaluation. Further deliveries of NCP are scheduled in 2000 to enhance the basic implementation and repair minor discrepancies identified in the original release.

Question. Provide the original costs estimates, and the current cost data, by fiscal year, for the Network Simplification Project, including schedule and capability data.

Answer. The table below is a cost comparison of the fiscal year 1999 cost estimate contained in the Project Commitment Document (PCD) for NSP to the current fiscal year 2000 PCD cost estimate.

	PY	Fiscal years—					Total
		2000	2001	2002	2003	2004	
Cost estimate (1999 PCD)	4.8	9.7	8.8	4.1	2.5	0.8	30.7
Cost estimate (2000 PCD)	16.4	10.4	5.4	3.7	4.5	.....	40.4
Change [1]	11.6	0.7	(3.4)	(0.4)	2.0	(0.8)	9.7

[1] NSP cost growth is entirely due to adding the final costs of the NCP to the beginning of the NSP.

Key Schedule Milestones are:

Tracking and Navigation—July 2, 2002.

Downlink Consolidation complete—August 3, 2002.

Uplink Consolidation complete—August 3, 2002.

Tracking and Navigation will include delivery of new telemetry hardware automation capabilities and diagnostic tools.

Downlink Consolidation will deliver new DSN Telemetry and Tracking racks, each with full Block V Receiver telemetry and tracking equipment.

Uplink Consolidation will include delivery of new/consolidated command, exciter and ranging hardware.

These deliveries will allow removal of all obsolete, high maintenance equipment performing these functions today.

Question. Please provide the current schedule for the transfer of MOPS contract work to CSOC.

Answer. See response to question number 25.

Question. There has been discussion that JPL wishes to reclassify "Mission Operations" as one of its "core competencies" and retain all related work in-house, requesting an additional 500 FTE's for this purpose. Please advise as to the accuracy of such a comment.

Answer. Mission operations are largely contractor supported. There has been no reclassification of operations work to core competency.

The Mars Program Independent Assessment Team report presented by Mr. Tom Young identified a need for more program management and project oversight at JPL

and for increased staffing in individual projects. JPL did receive a ceiling increase from NASA of 500 work-years to meet this and possible other needs. Approximately 35 work-years of this increase will be used to maintain key JPL activities in planetary operations.

The MOPS initiative was cancelled because the increase in the JPL workforce ceiling obviated the need for a contract partner in the area of planetary operations. A request for proposal (RFP) for the institutional computing services element that comprised the majority of effort in the MOPS procurement will be issued shortly, most likely to a small business.

MAJOR DEVELOPMENT

Question. Please provide detailed breakouts for each major program element for earth science identified on page SAT 3–15, beyond the level of each particular project to include all relevant details that make up the individual projects identified in the new budget structure. For example, $110.3 million is requested this year for the Chemistry mission. Breakout the detailed costs in 2001 for each of the flight projects (Terra, Aqua, Chemistry, Special Spacecraft and Landsat 7) identified on SAT 3–15.

Answer.

	Fiscal year
TERRA: Spacecraft/S/C GFE	3.1
AQUA:	
Project Support/Reserve	10.7
Instruments	5.9
Spacecraft/S/C GFE	23.1
Launch Vehicle	3.2
Fiscal year 2001 budget request	42.9
AURA (Chem):	
Instruments	40.4
Spacecraft	29.2
Project support/Reserve	15.6
Launch vehicle	23.5
OMI accommodation	1.6
Fiscal year 2001 budget request	110.3
IceSAT	46.3
Solstice/SORCE	23.0
Seawinds	.4
ACRIMSAT	.5
Meteor SAGE III	.2
Scisat ELV	5.7
Program Support	10.6
Total Special	86.7
Landsat-7:	
Spacecraft	1.2
Instrument	0.2
Fiscal year 2001 budget request	1.4

ALGORITHM DEVELOPMENT

Algorithm Development is addressed in response to question 27 and EOS Follow-on is addressed in response to question 28.

Question. $82.1 million is requested for algorithm development (SAT 3–15). Explain the principal activities, which will be undertaken with these funds. Please also breakout how these funds will be allocated by project and principal investigator. In addition, provide the total cost for algorithm development, project and/or principal investigator for the period fiscal year 1996–2000.

Answer. Algorithm Development is the basic work to develop the initial set of at-launch algorithms (development through launch plus 1 year), including geolocated and calibrated radiance data (Level 1), swath sampled fundamental science data

products (Level 2), gridded/averaged data products (Level 3), and Level 4 data products incorporating Level 2 or 3 data from multiple algorithms and/or more significant model calculations. Algorithm development includes supporting experimental and theoretical (modeling) work. It also includes code development and testing, prelaunch algorithm validation with experimental data, and first-order validation of the data products in the early post-launch period including work to address issues of instrument calibration and artifacts.

Algorithm development in the post-launch era includes long-term maintenance of the algorithms, such as implementation of improvements resulting from continuing validation work and user/application experience, and continued development of algorithms for research data products (planned Level 2 data products not available at launch).

Instrument operations ensures the integrity of instrument operations with primary emphasis on Level 1 data products. This support continues through the life of the mission and includes updating of calibration information, treatment of changing on-orbit instrument characterization, and code modifications and reprocessing of the data products to reflect these developments.

Also included under EOS algorithm development is support for the science team computing facilities (SCFs) that support data processing for algorithm development and maintenance, instrument operations and calibration studies, science data validation studies, and science data analysis. This involves a significant buildup prior to launch, and continuing post-launch maintenance and support.

EOS ALGORITHMS FISCAL YEAR 1996–FISCAL YEAR 2001

[In millions of dollars]

	Fiscal years—					
	1996 NOA	1997 NOA	1998 NOA	1999 NOA	2000 NOA	2001 NOA
Terra (formerly AM)	37.641	38.885	42.809	48.297	50.244	22.128
EOSP	.240	.260	.331	.375	.366	.....
Aqua (formerly PM)	6.926	7.671	9.878	12.988	12.748	15.960
Ocean Data Assimilation	.090	.090	.090	.....	.....	.....
Aura (formerly Chemistry)	3.674	4.921	7.500	13.004	18.041	21.472
Data Assimilation	.....	.090	.090	.090	.....	.....
SAGE III	1.730	2.469	3.097	3.475	3.918	1.208
Jason	.....	.835	1.277	.....	.....	.....
GLAS	2.194	1.455	2.603	4.124	5.894	3.537
TRMM (LIS & CERES)	3.956	3.995	5.007	5.326	4.840	.....
Landsat	1.450	1.327	2.243	2.309	2.639	.....
ACRIM	.250	.478	.303	.506	.425	86.000
SeaWinds	3.146	1.712	5.210	6.129	4.231	4.051
SORCE (formerly SOLSTICE)	.501	.542	.609	.443	1.596	1.103
Program Management	.051	.120	.....	3.466	.....	.....
Computing	4.602	.....	.....	.....	.....	.....
Data Assimilation Office	6.849	11.050	11.253	13.061	16.758	12.555
Total	73.300	75.900	92.300	116.800	121.700	82.100

EOS FOLLOW-ON

Question. Please breakout, in $500,000 or smaller increments, the uses of funds appropriated for this activity in fiscal year 1999 ($4.5 million) and fiscal year 2000 ($24.7 million), including contracts funded, studies undertaken, conferences supported, etc. How much of this money was used to conduct meetings and travel? Have any specific mission studies (phase A or B) been undertaken with these funds?

Answer.

[In millions of dollars]

Advanced Technology Microwave Sounder (ATMS) instrument design studies	.3
Project support for formulation activity	.7
CERES Flight model 5	.5
CERES Aqua support	1.4
CERES Terra support	1.3

CERES TRMM on orbit award fee	.3
Fiscal year 1999 content	4.5

These are the smallest increments available.

[In millions of dollars]

Fiscal year 2000 content:	
(SAT 3–15)	24.4
Less operating plan adjustments	−9.4
CERES support	−1.4
Remaining for NPP	13.6

Please see smallest increment available detail breakout below.

Preliminary Design Contracts $4M each to Aerojet and Ball Aerospace	8,000
Engineering support from QSS, MIT/Lincoln Labs, Swales	487
ATMS Instrument	8,487
Rapid Spacecraft Studies: $150K each to Ball, TRW, Lockheed Martin, Orbital, Spectrum Astro	750
Initial RSDO awards ($50K to each catalog vendor)	300
Technology demonstrations: several in-house C&DH data bus technologies	235
Engineering support from QSS, etc	270
Spacecraft	1,555
In-situ ground terminal: initiate in-house system design for future commercialization	300
FPGA development: in-house development for technology evaluation	309
Engineering support from Aerospace Corp. to develop Science Data Segment specifications	750
Ground Systems	1,359
IV&V support	450
Contract engineering support: CSC	430
Contract engineering support: SSAI	160
Misc. engineering support: IMDC charges, Swales	80
Project control support (CM, scheduling, general business support) and Misc	791
Project Support	1,911
Contingency	308
Total fiscal year 2000 NPP budget	13,620

None of the funds above are used to conduct meetings and travel. The funds required to support these activities are in the Mission Support Appropriation.

Question. Please explain why there is no current mission profile for the follow-on line given that planning for this activity has been underway for almost two years? Please explain how funds would be allocated in fiscal year 2001, including use of any carryover from prior years and allocations for specific missions.

Answer. There is no mission profile in the fiscal year 2001 President's request because there was no approved Research strategy in place to scientifically justify a particular type of measurement and mission required to obtain that measurement. Since the budget request, the Earth Science Enterprise has submitted a Research Strategy for 2000–2010. This strategy has been reviewed by an interdisciplinary panel established by the National Academy of Sciences at NASA's request. NASA developed this plan with help from members of our Earth System Science and Applications Advisory Committee (ESSAAC) of the NASA Advisory Council (NAC), and from the Earth Observing System Investigators Working Group (EOS/IWG). In doing so, we have taken into account recommendations from a number of National Research Council (NRC) reports issued during the past two years. The Research Strategy provides an extended overview that sets the scientific, policy and programmatic context. This overview identifies the primary science objectives and the

detailed questions that will guide our research and mission concept definition over the next decade. The draft reviewed by the Academy has been made publicly available on our ESE website (www.earth.nasa.gov).

The ESE Research Strategy establishes the paradigm for NASA's approach to Earth System Science. It establishes the logical progression from characterizing Earth system variability through identification of forces of change, Earth System responses, consequences of change, and, finally, prediction of future change. For each step along this path, a prioritized set of science questions is defined. These, in turn, lead to observational requirements, which become the basis for mission definition.

The plan will help to balance competing demands in the face of our limited resources and yet still chart a program that addresses the most important and tractable scientific questions and allows optimal use of NASA's unique capabilities for global observation, data acquisition and analysis, and basic research. To facilitate a sharper definition of primary mission requirements and clearer selection criteria, the plan also distinguishes among three types of space flight missions, each with a different purpose: systematic observation missions, exploratory missions, and operational precursor or technology demonstration missions. The identification of these different mission categories marks a significant departure from the original architecture of the Earth Observing System and should lead to a shorter development cycles and more cost-effective implementation.

A set of prioritization criteria is defined for the purpose of turning science needs into a priority mission set. These criteria include such factors as technology readiness and partnership opportunities. Recognizing that the ESE research program is conducted within a larger national and international context, the plan envisions seeking out opportunities for task sharing between our programs and those of our national and international partners. For instance, under the plan, NASA will promote the convergence of the operational observation requirements of partner agencies with ESE research data needs for systematic observations, share the cost of new developments, and develop precursor instruments and spacecraft technologies for future operational application missions. By doing so, ESE assures some of its very long-term high quality observational needs are met through operational systems.

ESE is establishing a list of priority systematic measurement missions as part of the fiscal year 2002 budget process based on our Research Strategy for the next decade. While preserving some flexibility in the order of these missions, their timing will be driven in part by the need for continuity with systematic measurements from the first series of EOS missions. As outlined in the Science Implementation Plan, NASA will actively support the development and implementation of an appropriate process to "complete the cycle" in which questions are formulated, scientific studies are carried out, and specific answers are developed to answer the questions. This is a dynamic process. For example, based on an earlier draft of the Science Implementation Plan, we are beginning formulation of what is called the NPOESS Preparatory Project (NPP) or "bridge" mission and the Landsat continuity mission.

For the "bridge" mission, we expect to complete our formulation activities and proceed into the Implementation Phase (completion of the Mission Confirmation Review) in late calendar year 2001. For the Landsat continuity mission, we expect to release a solicitation instrument in August of 2001. As future priority missions are defined, we will proceed with them based on the availability of funds.

In addition, for fiscal year 2001, NASA anticipates reprogramming many of these follow-on funds to accommodate launch delay impacts and mitigate risk on several of the EOS and Earth probe missions nearing development completion.

NPP

Question. The NPOESS Preparatory Project is listed as being in formulation studies. How much has been spent to date, by fiscal year, on NPP and from what lines in the earth science budget have these monies been allocated?

Answer. The NPP funding is allocated within the EOS Follow-on line.

	Fiscal years—	
	1999	2000
NPP Funding to Date	1.0	13.6

GODDARD AND EARTH SCIENCE

Question. Goddard's allocation of earth science dollars, both as an annual amount and as a percentage of the Earth Science Enterprise budget has dropped very sharply in the last five years. Please explain how you intend to reverse this problem, including identification of specific missions, in the near future, commencing, with the 2001 operating plan.

Answer.

[In millions of dollars]

	Fiscal years—				
	1997	1998	1999	2000	2001
Total Earth Science	1,362	1,417	1,414	1,443	1,406
GSFC Earth Science	1,024	930	882	895	812
GSFC percent Earth Science	75	66	62	62	58

This reduction in Earth Science funds allocated to GSFC is due to the rampdown of the development for the first series EOS missions. ESE is establishing a list of priority future systematic measurement missions as part of the fiscal year 2002 budget process based on our Research Strategy for the next decade. GSFC's Earth Science future funding levels will be established as post-2002 missions are defined based on the new ESE Research Strategy, and as GSFC successfully compete for new research activities. We anticipate that GSFC will be a major contributor in the development of this future follow-on activity. For example, GSFC is beginning implementation of the NPOESS Preparatory Project (NPP) or "bridge" mission and involved in the formulation of the Landsat continuity mission.

ENTERPRISE AND CENTER TAXES

Question. Please indicate, by program element and project, how headquarters, enterprise and center "taxes" are assessed against the earth science budget—by program element and project, including: SOMO charges, support contractors, interagency and international agreements, special initiatives—whether statutory or not, conferences & workshops, program evaluation, proposal review and proposing, administrative overhead and any other relevant charges assessed against the earth science budget by headquarters, Code Y management, or any individual center.

Answer. NASA Headquarters (Office of the Comptroller) makes a flat rate assessment across the board of less than half a percent on the Earth Science budget. This assessment is not broken out by program, project, statutory, non-statutory requirements, etc. This assessment is taken off the top of the Earth Science appropriation. It is used to fund the following: (1) GSFC Center Director's Discretionary Fund (CDDF—the vast majority of the assessment goes to this), (2) Agency's Cost Estimating function and, (3) Earth Science closed accounts (old/late bills that come in that must be paid). When the agency receives Earth Science related reimbursable funds (domestic or international), a small assessment is withheld from the program/project, at NASA Headquarters and used for the financial and contract administration of reimbursable funds. The Office of Earth Science does not assess taxes on the Earth Science budget. GSFC Center assessments on Earth Science programs/projects are calculated based on a complex budget/cost algorithm that takes into account: project/program budgets, flight vs. non-flight projects, Full-Time Equivalents, level of institutional usage of facilities and services, and other Center unique costs and activities. The remaining activities (e.g. support contractors, SOMO) are directly funded within the project budgets.

EOSDIS

Question. Please breakout EOSDIS costs (for fiscal years fiscal year 1996–2001) by each of the six major components identified on SAT 3–30, explaining the general activity of each component. Explain the relevant deltas for activity between fiscal year 1999, 2000 and 2001 for each component.

Answer.

General Activity Descriptions:

EOSDIS Core System (ECS).—Provides the Mission Operations segment for EOS spacecraft and the Science Data processing System (SDPS). The SDPS provides ingest, processing, archiving and distribution of EOS mission data.

EOS Data and Operations System (EDOS).—Responsible for data capture from EOS spacecraft, interface up-link of command, processing and distribution of Level 0 data products and archival of Level 0 data.

EOS Polar Ground Network (EPGN).—Provides X-band receiving capabilities for science data dumps and S-band telemetry, tracking and command capabilities for Landsat-7, and EOS spacecraft.

Science Investigator-led Processing System (SIPS).—Responsible for producing standard data products and delivering them to the Distributed Active Archive Centers (DAACs). This instrument team processing of data is an alternative some investigators have chosen from providing the science software to the DAACs to allow data production generation at the DAACs.

DAACs.—Eight geographically dispersed science data processing centers responsible for EOSDIS data management and user services within a particular science discipline. The DAACs also archive the data for future use.

NASA Integrated Services Network (NISN).—EBNet is part of the larger NISN which provides the communications to support EOSDIS including: forward- and return-link communications for flight operations; high-capacity circuits for transport of science data from ground terminals to EDOS to the DAACs; inter-DAAC communications; communications with cooperating data centers and international partners.

SIX MAJOR ELEMENTS OF EOSDIS FUNDING SUMMARY

[In millions of dollars]

Budget area	Fiscal years—					
	1996	1997	1998	1999	2000	2001
ECS	121.5	100.7	83.0	118.6	104.8	73.8
EDOS	34.5	24.4	22.1	22.1	10.4	10.8
EPGN	.....	1.8	4.8	7.1	4.8	2.6
SIPS	.....	.....	.....	3.3	10.3	17.6
DAACS	29.4	36.1	28.9	33.7	39.9	52.0
NISN	6.0	7.4	7.4	7.4	19.2	8.1

Relevant Deltas fiscal year 1999–fiscal year 2001:

ECS.—The fluctuations in the ECS line reflect large equipment purchases in fiscal year 1999. In fiscal year 2000 and 2001 the costs are primarily labor driven and tied to releases of both science and mission operation systems primarily for Terra and Aqua.

EDOS.—The significant decrease in the EDOS line from fiscal year 2000 to 2001 is a result of the completion of the work and expiration of the EDOS contract in fiscal year 2001.

EPGN.—The delta from fiscal year 1900 to 1901 in EPGN reflects a change in agency philosophy to have projects buy services through the Space Operations Management Office (SOMO) and no longer purchasing equipment and contracting directly for the requirements.

SIPS.—The ramp up of costs in the SIPS area is a result of more missions and therefore more SIPS coming on line.

DAACs.—The ramp up of costs in the DAAC area is a result of increased requirements to support the added missions in orbit.

NISN.—The large increase from fiscal year 1999 to fiscal year 2000 is primarily a result of Landsat-7 and Terra launches. The large decrease from fiscal year 2000 to fiscal year 2001 is based on the assumption that SOMO will pay for data transmission services beginning in fiscal year 2001.

DAACS

Question. Please breakout the full life cycle investment for each of NASA's DAACs since they were each created, including civil service/salary and expense costs for the relevant "in-house DAACS (including JPL, facilities charges (including capital renovation or new construction) and instrumentation/equipment. Costs for algorithm development should be included where applicable.

Answer. The end-to-end life cycle costs (fiscal year 1991–fiscal year 2005) for the NASA DAACs are shown below. The costs shown include operations, science support, and development and maintenance costs for the Version 0 and TRMM systems at the DAACs (including the JPL development costs for the ASF systems). The estimates of civil servant salaries have been included for EDC, GSFC, and LaRC. The

operations costs for the ECS systems at the DAACs are estimated based on the ECS contract proposal. These costs do not include the development or maintenance costs for the ECS system nor the costs incurred by ESDIS and ECS for general DAAC operations support. The development and maintenance costs for the ECS system and the general operations costs are included in the data provided for Question 33.

Life Cycle DAAC Costs

[In millions of dollars]

Fiscal year 1991–fiscal year 2005:	
ASF	138.6
EDC	99.3
GSFC	137.9
JPL	72.0
LaRC	123.6
MSFC [1]	12.1
NSIDC	46.2
ORNL	29.3
SEDAC	29.8

[1] MSFC DAAC was closed in 1998.

SCIENCE INVESTIGATOR-LED PROCESSING SYSTEMS (SIPS)

Question. Please provide detail for all awards in this component for fiscal years 1999, 2000 and anticipated for 2001, indicating all funding recipients. Please differentiate funds between regular SIPS activity and those identified as the 24 ESIPS (Earth Science Information Partners), the so-called EOSDIS Federation, providing funding allocations, by year, for all three years (99,00, 01) for each of the 24 ESIPS. For 2001 estimates, include any funds proposed for allocation to the ESIPS from the ESARP Applications budget identified on page SAT 3–65.

Answer. The SIPS, or the DAACS as the case may be, are responsible for standard data and information whose production, publishing/distribution, and associated user services requires considerable emphasis on reliability and disciplined adherence to schedules.

SIPS BUDGET

[In millions of dollars]

EOS Mission(s)	EOS Instrument(s)	Organization	Fiscal years—		
			1999	2000	2001
Terra (AM) & Aqua (PM)	CERES	NASA LaRC	.894	3.027	2.240
Terra & Aqua	MODIS	NASA GSFC	1.415	4.469	8.100
Terra	MOPITT	NCAR	.120	.240	.102
Aqua	AMSR–E	NASA MSFC	.396	1.104	1.017
ICESat	GLAS	NASA GSFC	.336	1.064	.979
Aura (CHEM)	HIRDLS	NCAR	.....	.....	.468
Aura (CHEM)	MLS	NASA JPL	.164	.361	1.505
Aura (CHEM)	TES	NASA JPL	.....	.....	3.220
Total			3.325	10.265	17.631

The Earth Science Information Partners (ESIPs) differ from the regular SIPS in that they do not produce standard products from NASA Earth Science missions, as do the SIPS.

Type 2 ESIPs are responsible for data and information products and services in support of Earth System Science (other than those provided by the DAACs/SIPS) that are developmental or research in nature or where emphasis on flexibility and creativity is key to meeting the advancing research needs. They depend on data products provided by SIPS, but develop higher level geophysical data products in support of interdisciplinary science investigations.

Type 3 ESIPs are those providing ESE-based data and information products and services to users beyond the Earth System Science research community who enter into joint endeavor agreements with NASA ESE in order to extend the benefits of ESE beyond the research community or to enhance EOSDIS capabilities.

The ESIP Federation is an organization wherein the DAACs (aka ESIP 1s), the ESIP 2s and the ESIP 3s can exchange scientific and technical information related to data and information system and service provision. Money set aside for the Federation provides the means to customize existing interfaces, tools, and data for a community of users to meet the needs of other user groups being served by the diverse ESIPs. Included, as requested, are the funding allocations, year by year, for the 24 ESIPs.

FISCAL YEAR 2000 ESIP FUNDING

[In millions of dollars]

Contract Number	ESIPs Type 2	Principle Investigator	Fiscal years—		
			1999	2000	2001
NCC5–300	University of Maryland	Dr. J. Townshend	1.250	1.200	.400
NCC5–301	Univ of California/LA	Dr. R. Muntz	1.000	1.100	.375
NCC5–302	Univ of California/SB	Dr. J. Frew	1.000	1.100	.350
NCC5–303	Michigan State University	Dr. D. Skole	1.000	1.000	.350
NCC5–304	Univ of New Hampshire	Dr. B. Moore	1.000	1.000	.350
NCC5–305	IBM	Dr. C. Li	1.000	1.000	.350
NCC5–306	George Mason Univ	Dr. M. Kafatos	1.050	.985	.215
NCC5–307	Univ of Rhode Island	Dr. P. Cornillon	.950	.911	.240
NCC5–308	Univ of California/SD	Dr. J. Simpson	.400	.425	.150
	MSFC	Dr. R. Spencer	.950	.900	.300
	JPL	Dr. V. Zlotnicki	.800	.800	.200
	JPL	Dr. T. Yunck	.850	.850	.300
Total Type 2 ESIPs			11.3	11.3	3.6
NCC5–309	Univ of New Mexico	Dr. S. Morain	.200	.200	.251
NCC5–310	Univ of North Dakota	Dr. G. Seielstad	.500	.500	.500
NCC5–311	Rice University	Dr. P. Reiff	.450	.475	.400
NCC5–312	Planet Earth Science	Dr. C. Gautier	.130	.150	.200
NCC5–313	Calif Resources Agency	G. Darling	.470	.320	.338
NCC5–314	NBC Corp	Dr. D. Jones	.400	.400	.350
NCC5–315	USRA	K. Kalpaakis	.320	.340	.230
NCC5–316	Univ of Minnesota	Dr. T. Burk	.240	.260	.199
NCC5–317	Bay Area Shared Info	D. Etter	.200	.200	.150
NCC5–318	Scientific Fisheries	P. Simpson	.030	.034	.....
NCC5–319	MRJ Technologies	D. Kliman	.038	.040	.010
NCC5–320	Reading Info tech	F. Sun/K. Meagher	.067	.....	.....
Total Type 3 ESIPs			3.0	2.9	2.6
Total ESIP Funding			14.3	14.2	6.2

NEW DISS

Question. Please detail who has been involved in the New DISS activity (SAT 3–31), how much has been spent on this activity to date, what is projected in the future (2001 and beyond), and what contracts, if any, have been supported for this New DISS work. Also please explain what specific work has been done and what NASA's plans are for how the New DISS will build upon the EOSDIS investments made over the last decade.

Answer. To date the New DISS activity has been in the stage of concept development. A team of experts from academia, Industry and Government was assembled in October of 1998, and met several times throughout fiscal year 1999 and fiscal year 2000 to prepare a New DISS concept document.

The total cost of the New DISS activity so far has been to support meeting costs (4 meetings) for the non-civil service members of the New DISS expert team, approximately $80K.

The Earth Science Technology Office at GSFC let a study (contractor was Aerojet) of the technologies that would be needed to implement the New DISS concept in fiscal year 1999. Cost of the study was $59K.

NASA is presently organizing a transition team to look at how the New DISS concept can be implemented. As the question indicates, the New DISS concept is to build upon NASA's EOSDIS investments while evolving our data and information

systems and services to incorporate information technology advances, which should make the system more flexible.

Funding for this activity in fiscal year 2001 and beyond is under review at this time.

New DISS Team Members

Members

Martha E. Maiden, NASA Headquarters, Chair; Vanessa Griffin, NASA Goddard Space Flight Center; Mathew Schwaller, NASA Goddard Space Flight Center; Candace Carlisle, NASA Goddard Space Flight Center; Ronald L.S. Weaver, University of Colorado; Roy Jenne, National Center for Atmospheric Research; Karen White, NASA Headquarters; Sara J. Graves, University of Alabama, Huntsville; David L. Skole, Michigan State University; Anngienetta R. Johnson, NASA Headquarters; Guenter R. Riegler, NASA Headquarters; Thomas A. Lasinski, Lawrence Livermore National Laboratory; and John R. G. Townshend, University of Maryland, College Park.

Consultants

Mark R. Abbott, Oregon State University; George David Emmitt, Simpson Weather Associates Incorporated; James Frew, University of California, Santa Barbara; David M. Glover, Woods Hole Oceanographic Institution; Anthony C. Janetos, World Resources Institute; Thomas Karl, NOAA National Climatic Data Center; Pamela A. Matson , University of California; Dorothy Perkins, NASA Goddard Space Flight Center; Moshe Pniel, Jet Propulsion Laboratory; Carl Reber, NASA Goddard Space Flight Center; Richard B. Rood, NASA Goddard Space Flight Center; and Christopher Scolese, NASA Goddard Space Flight Center.

EARTH PROBES

Question. Please provide the life cycle cost estimates for each of the earth probes listed on SAT 3–37, including the original cost estimate at the start of the project (Phase B and C/D), and the current estimate cost for each. Please explain.

Answer.

Background

The Earth Probes listed on page SAT 3–37 of the NASA 2001 Budget Request to Congress (see URL http://ifmp.nasa.gov/codeb/budget2001/for more information) are:

[In millions of dollars]

Earth Probe Mission	Original Life Cycle Estimate	Current Life Cycle Estimate
Total Ozone Mapping Spectrometer (QuikTOMS)	$34.3	$34.3
Earth System Science Pathfinders:		
VCL	59.8	([1])
GRACE	86.0	([2])
PICASSO–CENA (in formulation)	112.2	112.2
CloudSat (in formulation)	115.8	115.8
Volcam alternate mission study[3]	[4] 500	[4] 500
Experiments of Opportunity	[5] 250	[5] 250
Triana	75	117
University Class Earth System Science	[6] 15	[6] 15

[1] Under review.
[2] Replan in process.
[3] No Life Cycle estimate applicable as this is a funded study only.
[4] In thousands of dollars.
[5] Thousands of dollars each.
[6] Millions of dollars each.

Explanations:

General.—The Life Cycle Estimates above are for NASA only. Many of these missions involve partnerships with significant contributions from other US Government and/or International Space Agencies.

Total Ozone Mapping Spectrometer (QuikTOMS).—The $34.3M figure shown is the funding from the Earth Probes line only. Additional funding comes from operations and science budget lines.

VCL.—NASA confirmed the original life cycle cost estimate of $59.8M at the Mission Confirmation Review in March of 1998. More than one year later, NASA directed the VCL team to switch to Athena 1 (former Clark launch vehicle), increasing the cost estimate to $67.3M. Recent difficulties with the delivery of the instrument, and concerns over the quality assurance of missions in this class based on the failure of the Mars missions, has led NASA to reassess VCL. This reassessment is ongoing.

GRACE.—NASA confirmed the original life cycle cost estimate of $86.0M at the Mission Confirmation Review in December of 1998. A replan is underway due to the contractor (German Company DSS) diverting workforce from GRACE to the CHAMP mission delay in addition to GRACE hardware and software problems.

PICASSO–CENA.—Original cost of $112.2M. NASA will establish the baseline life cycle cost at the Mission Confirmation Review, based upon proposed cost, impact of risk reassessment, and the impacts of launch vehicle costs savings.

CloudSat.—Original cost of $115.8M. NASA will establish the baseline life cycle cost at the Mission Confirmation Review, based upon proposed cost, impact of risk reassessment, and the impacts of launch vehicle costs savings. Additionally, NASA may provide CloudSat with additional funding based on the arrangement with the Canadian Space Agency for the RFES hardware.

Volcam alternate mission.—Volcam is the alternate mission, should either PICASSO–CENA or CloudSat fail to demonstration that it can satisfy its level one requirements at the time of Mission Confirmation Review. The VOLCAM team is supported at a low, study effort level.

Experiments of Opportunity.—The Experiments of Opportunity are a series of very low cost (approximately $250K each) payloads on free flying satellites, the space shuttle and International space missions. Examples include the Global Positioning Satellite (GPS) experiments on the already launched Orstead and Sunsat and the upcoming Champ and SAC–C missions.

Triana.—House Report 106–379 directed "NASA to suspend all work on the development of the Triana satellite using funds made available by this appropriation until the National Academy of Sciences (NAS) has completed an evaluation of the scientific goals of the Triana mission." The Academy released a favorable report in March 2000. The House Report recognized that "there will be some additional cost resulting from the delay." The additional cost to the Triana program associated with the suspension of development and related activities is approximately $40 million. This brings the total cost of the Triana project from the original baseline of $77 million to $117 million. Of the $40 million cost growth, $16.5 million is associated with the stand down and recovery. This includes funding to address some technical problems in developing the sophisticated scientific instruments that were exacerbated by the stand down. NASA added $7.5 million to implement several NAS recommendations. Another $6.8 million is required to refurbish an alternate deployment platform that NASA is borrowing under an agreement with the Italian Space Agency to safely deploy Triana from the Shuttle bay. The decision to use this platform was taken in response to the Shuttle safety review process; this hardware has flown on a prior mission. And, $9.1 million has been added for risk reduction, including a moderate augmentation to program reserves. Triana's current launch readiness date is October 2001. Triana is manifested as a secondary payload on STS–112 (Research Mission), which is currently targeted for launch on April 18, 2002.

University Class Earth System Science.—In fiscal year 2000 NASA competitively selected four University team concepts for mission study funding. In fiscal year 2001, NASA intends to select two of these concepts for final formulation and implementation. Each mission is capped at $15M.

Question. Almost $18 million is budgeted in the 1999–2001 period for program support and future missions. Please explain what these funds have supported, including which contracts and kinds of program support. Why does the justification fail to describe anything about this activity, given that it is scheduled to grow by 163 percent (from $3.5 million to $9.2 million) between 2000 and 2001?

Answer. We apologize for our oversight in failing to describe the Earth System Science Pathfinders (ESSP) Program Support and Future Missions in the budget justification.

The Earth Probes program support allows NASA to take an integrated view of the Earth Probe missions for quality assurance and cross-project optimization. Program support provides for NASA technical insight through engineering support contracts for reviews, analysis, technical expertise, quality assurance, Space Operations Management Office (SOMO) related costs and independent validation and verification (IV&V). It also provides for the independent reviews and review teams for cost analysis, confirmation and Red Teams. In addition, the program support line includes institutional expenses and assessments.

For future Earth Probe missions, the strategy of the Earth Science Enterprise is not commit in advance to a set program of experimental satellite missions for the next ten years. Instead, NASA will issue successive solicitations for comprehensive mission implementation proposals addressing specific science themes and their associated priorities subject to the peer review process. NASA will determine step by step the sequence of scientific disciplines addressed by the Earth Probe program, taking into consideration scientific priorities confirmed by scientific institutions and bodies, technical and funding capabilities, and opportunities for international cooperation. These exploratory missions, yielding new scientific breakthroughs, are a significant component of the Earth Science Enterprise's program, in conformity with the strategic mission of NASA to promote research and development. Each exploratory satellite project is expected to be a one-time mission that can deliver conclusive scientific results addressing a focused set of scientific questions/objectives. This is the epitome of faster, better, cheaper, enabling rapid response to emerging scientific priorities, maturing technical solutions, and creative partnership opportunities.

EARTH SCIENCE PROGRAM SCIENCE

Question. Please identify all R&A solicitations released (and dollars used to fund proposals) in 1999 and 2000. Please provide a crosswalk for amounts provided for R&A in each year as identified on SAT 3–45 and explain any deltas.

Answer.

[In millions of dollars]

	NRA #	Release Date	Funding Per Year
Fiscal year 1999 Research NRA's:			
Solid Earth & Natural Hazards	NRA–98–OES–13	12/24/1988	3.5
EO–1 Data Evaluation Program	NRA–99–OES–01	04/02/1999	1.5
Earth Science Education Program	NRA–99–OES–02	06/29/1999	[1].8
Tropical Rainfall Measurement Mission (TRMM)	NRA–99–OES–03	07/21/1999	5.5
Modeling & Data Analysis Research	NRA–99–OES–04	07/23/1999	22.0
Ozone Monitoring Instrument (OMI)	NRA–99–OES–05	09/29/1999	2.5
Land-Cover & Land-Use Change	NRA–99–OES–06	07/29/1999	2.0
Sub-Total Fiscal Year 1999 Research NRA's			37.8
Funding to support Grants awarded in fiscal year 1997 and fiscal year 1998.			98.2
Total fiscal year 1999 R&A—Science			136.0
Fiscal Year 2000 Research NRA's:			
SIMBIOS	NRA–99–OES–09	12/02/1999	3.0
RADARSAT–1/ADRA–2	NRA–99–OES–10	12/20/1999	2.0
Trace P	NRA–00–OES–01	01/28/2000	6.0
Uninhabited Aerial Vehicle (UAV)	NRA–00–OES–02	02/28/2000	4.0
EOS Aqua	NRA–00–OES–03	05/08/2000	2.0
New Investigator Program	NRA–00–OES–04	04/27/2000	1.5
Oceanography	NRA–00–OES–05	05/26/2000	4.0
Sub-Total Fiscal Year 2000 Research NRA's To-Date			22.5
Funding to support grants awarded in fiscal year 1998 and fiscal year 1999 and grants yet to be awarded in fiscal year 2000.			141.8
Total Fiscal Year 2000 R&A—Science			

[1] Jointly funded w/Codes F, E ($800K in Code Y portion).

Notes: 1. The difference between SAT 3–45 budget for fiscal year 1999 and 00 is due to 2nd and 3rd year renewals from previously selected solicitations; 2. Before 2nd and 3rd year renewals are funded, an in-depth annual review of the PI's progress is done; 3. There will be additional R&A solicitations released in fiscal year 2000.

EOS SCIENCE AND MISSION SCIENCE TEAMS—RESEARCH

Question. How are awards made for each of these sub-program elements listed on page SAT 3–45? Are they all award competitively through the peer review process (please explain in detail)? Detail all individual or institution-based awards for 1999 and 2000, by flight project or other relevant indicator, and explain, the use and proposed allocation (by subject and individual institution/investigator) of extra funds

(+$44.2 million/+81 percent) requested for 2001 for Mission Science Teams—Research in 2001.

Answer. The award process used for Research and Analysis—Science, EOS Science, Mission Science Teams—Research, and Uncrewed Aerial Vehicles (UAV) described below:

NRA's are periodically developed by the EOS Project Science Office in cooperation with appropriate Earth Science Program Managers from NASA Headquarters, with input from the EOS instrument science teams via their publicly accessible and peer-reviewed Science Data Validation Plans, and from the external science community via open workshops. The NRA's are subject to the normal peer review and approval process and are advertised via Commerce Business Daily and through various mailing lists maintained by NASA Headquarters. Peer review is used extensively in NASA science, applications, education, technology (SAET) and appropriate flight mission acquisitions. It is essential for a high quality, relevant program. The use of external peer review enhances the quality of NASA's investigations and activities because it brings the best and most critical national and international experts to the evaluation process. External peer review ensures that fresh viewpoints, alternative perspectives and state-of-the-art understanding are included in the evaluation process. Each review includes a written record of the evaluation and evaluation records are maintained. The evaluation results are used to make a judgement about the merits of each proposal and ultimately are used as the basis to make a selection for an award. For more detailed information regarding our peer review and approval process please see our Office Work Instructions HOW17040–Y012 found on our web site http://HQISO9000.HQ.HASA.GOV/. Submitted proposals are subject to a rigorous peer review process including written mail reviews and a panel review by experts. Program Scientists from NASA Headquarters are actively involved in the NRA development and proposal review process to ensure appropriate integration with NASA's Research and Analysis Programs. The selecting official is Director, Research Division, Office of Earth Science, NASA Headquarters. Grants are implemented within 6 months prior to the planned launch of a platform to enable the required preparations to occur prior to the availability of the satellite data and, thereby, speed the validation process. The Airborne Science and Applications and Information Systems activities are not competitively awarded.

[In millions of dollars]

	Fiscal years—		
	1999	2000	2001
TOMS Science Team	0.9	1.0	1.0
TRMM Science Team	14.3	11.3	13.2
Seastar Science Team	2.5	2.5	2.7
RADARSAT Science Team	2.5	2.4	2.5
UARS Science Team	4.9	4.7	3.0
ERBE/SAGE Science Team	4.3	4.5	3.5
Altimetry Science Team	2.3	1.4	1.5
NIST Calibration	0.1	0.1	0.1
SBUV/2 Science Team	1.3	1.3	1.2
Ocean Winds Science Team	4.4	3.1	3.7
AVIRIS/AIR SAR/TIMS Science Team	1.6	1.7	1.7
Pathfinder Data Sets	3.5	3.7	3.3
SIMBIOS	5.5	2.0	4.2
SLR Science	.....	8.7	6.7
Land Cover Science Office	.....	1.7	1.5
ESSP Science	.....	.....	1.0
Mission Science Teams	48.1	55.8	100.0
Funding Shift from Algorithm Development to Mission Science Teams:			
TRMM Science (transfer[1] from Algorithm Development)	.....	.....	4.5
Altimetry Science (transfer from Algorithm Development)	.....	3.9	4.0
Ocean Winds (transfer from Algorithm Development)	.....	1.8	1.8
Terra Science Team	.....	.....	18.9
Aqua Science Team	.....	.....	7.3

[In millions of dollars]

	Fiscal years—		
	1999	2000	2001
SAGE III Science	.....	.....	3.0
IceSAT Science	.....	.....	2.7
Landsat-7 Science	.....	.....	2.6
ACRIM Science	.....	.....	0.5
SORCE Science	.....	.....	0.7
Guest Investigator Program	.....	.....	3.2
Total Transfer from Algorithm Development to Mission Science Teams	.....	5.7	49.2

[1] Recommend deletion of word ''augmentation & replace with word ''transfer''—statement is consistent with restructure

Mission Science Teams.—Research consists of two primary activities:

—Data Analysis which supports use of the satellite's (both existing and new ones) data to produce science results and the processing and re-processing of the data toward this end, including special requests and requirements for augmented science data processing and combination with other data and/or models.

—Calibration and validation which includes activity that supports pre- and post-launch calibration and validation required by the instrument team to assess the validity, quality and applicability/limitations of the derived data products. This includes comparisons of data products to those produced by other instruments and platforms, vicarious calibration (calibration validation via correlative measurements) of Level 1 data products, and use of analysis and correlative measurements to validate Level 2 data products where the latter may involve continuous, regular or episodic in-situ and/or remote ground-based and/or airborne measurements.

Fiscal Year 2001 Mission Science Teams-Research $44.2M increase.—The Mission Science Teams-Research budget provides the opportunity for scientists from all institutions to participate in the analysis, verification, and utilization of data from NASA's currently operating space-based instruments. The budget increase in fiscal year 2001 is the result of funds that were in the past provided to the EOS instrument science teams for algorithm development being converted to mission analysis. This increase largely reflects the inclusion of the Terra and Aqua as members of NASA's currently operating space-based instruments.

APPLICATIONS—RESEARCH AND ANALYSIS

Question. Please breakout allocations for this line on SAT 3–65 for 1999, 2000, and 2001, including data for each of the four activities listed on 3–69 and 3–70 (RESACs, NASA–USDA cooperation, ESIPS, and the state and local government initiative).

Answer. (a) The breakout allocations for SAT 3–65 (Research and Analysis—Applications) are as follows:

FUNDING

[In millions of dollars]

Applications Research	Fiscal years—		
	1999	2000	2001
Applications and Assessments	5.9	9.4	6.8
Earth Science Extension Network	0.5	2.6	7.0
Natural Hazards	5.4	6.4	5.4
Project Support	2.4	3.5	2.0
Applications Earmarks	11.4	11.4	.....
Total applications	25.6	33.3	21.2

(b) The breakouts for the four activities listed on SAT 3–69 and 3–70 are as follows:

FUNDING

[In millions of dollars]

	Fiscal years—		
	1999	2000	2001
Regional Earth Science Applications Centers (RESACs) RESACs were fully funded in fiscal year 1999 for three years of performance ($M)	13.7	.....	.....
NASA—USDA Cooperative Projects ($M)	2.6	2.4	2.3
Type 3 Earth Science Information Partnerships (ESIPs) ($M) [ESIPs are funded by EOSDIS]	2.9	2.8	2.6
State and Local (not RESACs or ESIPs) ($M)	7.3	23.4	8.6
Applications (ESARP)	4.3	4.9	5.1
State and Local Initiative	.....	0.6	3.5
Congressional Interests:			
RACs	3.0	0.3	.....
Cayuga County	.....	9.2	.....
Raytheon	.....	6.3	.....
Univ. of Missouri	.....	1.8	.....
State Univ. of NY	.....	0.3	.....

APPLICATIONS PARTNERSHIPS/PROJECTS

Question. Please detail all major projects and/or partnerships supported by the Applications, Commercialization and Education whose total support over the fiscal year 1999–01 period will exceed $250,000, and amounts allocated to each, including such things as the 13 projects identified in the USDA partnership, the Type 3 ESIPs, and the 11 cooperative agreements in state and local programs.

Answer.

[In thousands of dollars]

STATE	PROJECT	PRINCIPAL INVESTIGATOR	PI AFFILIATION	FISCAL YEARS—		
				1999	2000	2001
	USDA Partnerships—(Ag NRA)					
California [1]	Viticultural Integration of NASA Technologies for Assessment of the Grapevine Environment (VINTAGE).	Lee Johnson (ljohnson@mail.arc.nasa.gov)	NASA/ARC and CSU	200.0	200.0	200.0
California [1]	Implementation of Predictive Soil Modeling in the National Cooperative Soil Survey.	Oliver Chadwick (oac@geog.ucsb.edu)	UCSB	124.5	110.7	151.5
California [1]	Using Remote Sensing to Monitor the Impacts of Flood-Irrigation of Meadows in the East Walker River Basin of California.	Kenneth Tate (kwtate@ucdavis.edu)	UC-Davis	199.5	188.3	155.7
Colorado [1]	Prototyping Value-added EOS Data for Rangeland Management and Assessment.	Mark Weltz (weltz@gpsr.colostate.edu)	USDA–ARS	199.9	199.1	199.0
Kansas [1]	Remote Sensing-based Geostatistical Modeling for Coniferous Forest Inventory and Characterization.	Mark Jakubauskas (mjakub@eagle.cc.ukans.edu)	Univ. of KS	198.9	200.0	180.0
Maryland [1]	Forest Characterization and Inventory using Airborne and Space-based Lidar.	Ralph Dubayah (rdubayah@geog.umd.edu)	UMD	199.6	198.0	199.5
Maryland [1]	Assessment of Global Crop Production from New Generation Remote Sensing Technology.	Paul Doraiswamy (pdoraisw@asrr.arsusda.gov)	USDA–ARS	170.1	164.0	156.9
Michigan [1]	Forest Structure from Multi-spectral Fusion	Craig Dobson (dobson@umich.edu)	Univ. of MI-Ann Arbor	194.9	198.8	200.3
Minnesota [1]	Integrating Satellite Remote Sensing into Forest Inventory and Management.	Marvin Bauer (mbauer@tc.umn.edu)	Univ. of MN	200.0	200.0	200.0
Minnesota [1]	Mapping Consistent Within-Field Patterns of Variability Using Multi-temporal Satellite Images.	Damien Lepoutre (dlepoutre@geosys__intl.com)	GEOSYS Inc	200.0	200.0	200.0
Mississippi [1]	Leaf Area and Volume Estimates in Loblolly Pine Forests Derived from Aerial Lidar.	Scott Roberts (sroberts@cfr.msstate.edu)	MSU	182.1	96.8	.....
Montana [1]	Developing Methods for Mapping Fuel Characteristics for Predicting Fire Behavior Across the United States.	Robert Keane (rkeane@fs.fed.us)	USDA Forest Service	199.2	198.7	199.3
South Dakota [1]	Regional Change Monitoring of Habitat Reserve Systems with Very High Resolution Remotely Sensed.	Data Douglas Stow (stow@sdsu.edu)	SDSU	199.1	198.8	199.0
South Dakota [1]	Application of Remote Sensing to Forest Resource Inventory and Habitat Modeling.	Maribeth Price (mprice@msmailgw.sdwt.edu)	SD School of Mines & Techn.	115.7	93.1	97.2

	Type 3 ESIPs ([2]) and Coop Agreements ([3])					
California [2]	ESE Education Series	Catherine Gautier (gautier@planearthsci.com)	Planet Earth Science Inc.	130.0	150.0	200.0
California [2 3]	California Land Science Information Partnership (CaLSIP).	Gary Darling (gary@ceres.ca.gov)	CERES, California Resources Agency.	470.0	320.0	338.0
California [2 3]	Integration and Application of MTPE Data and Information to the San Francisco Bay Area and Monterey Bay Region.	David Etter (detter@basic.org)	Bay Area Shared Info. Consortium.	200.0	200.0	150.0
District of Columbia [2]	NBC News and Information: ESE Data to the World	Dave Jones (dave.jones@nbc.com)	WRC–TV	400.0	400.0	350.0
Maryland [2]	Integrating Environmental and Legal Information Systems.	Konstantinos Kalpakis (kalpakis@csee.umbc.edu)	USRA/CESDIS	320.0	340.0	230.0
Minnesota [2 3]	TerraSIP: A Spatial Information Partnership for Land Managers.	Thomas Burk (tburk@forestry.umn.edu)	Univ. of MN	240.0	260.0	199.0
New Mexico [2 3]	Performing a Regional Assessment and Prototyping Internet Accessible ESE Products for the Upper Rio Grande Basin.	Stan Morain (smorain@spock.unm.edu)	UNM	200.0	200.0	251.0
North Dakota [2]	A Public Access Resource Center (PARC): Empowering the General Public to Use EOSDIS Phase III Operations.	George Seielstad (gsteielst@aero.und.edu)	Univ. of North Dakota	500.0	500.0	500.0
Texas [2]	Creating Museum and School Learning Modules and Immersive Planetarium Shows.	Patricia Reiff (reiff@rice.edu)	Rice Univ	450.0	475.0	400.0
	Cooperative Agreements					
Arizona [4]	NASA Southwest Earth Science Applications Center	Roger Bales (roger@hwr.arizona.edu)	Univ. of AZ	[5] 1,500.0	.....	.....
Arizona [4]	Support of USGCRP Regional Workshops on Global Climate Change: Develop Model Linking Local Sustainability to Global Climate: Remote Sensing Applications Research for Local Governments.	Wil Orr	Prescott College	430.0	430.0	430.0
California [4]	California Water Resources Research and Applications Center.	Norman Miller (nlmiller@lbl.gov)	LLL	[5] 1,500.0	.....	.....
California [4]	Southern California Center for Managing Fire Hazards at the Urban-Wildlands Interface.	Chris Lee (ctlee@research.csudh.edu)	CSU, Dominguez Hills	[5] 1,600.0	.....	.....
Connecticut [4]	Better Land Use Planning for the Suburbanizing Northeast.	Chester Arnold (chester.arnold__jr@uconn.edu)	Univ. of CT	[5] 1,100.0	.....	.....
Maryland [4]	Remote Sensing for Resource Management: The Mid-Atlantic RESAC Consortium.	Stephen Prince (sp43@umail.umd.edu)	UMD	[5] 1,730.0	.....	.....
Minnesota [4]	Upper Great Lakes Regional Earth Sciences Application Center.	Marvin Bauer (mbauer@tc.umn.edu)	Univ. of MN	[5] 1,500.0	.....	.....
New York [4]	Use of ESE Data for Cayuga County Planning	Bob Brower (bbrower@co.cayuga.ny.us)	Cayuga County, NY	3,000.0	9,200.0	

[In thousands of dollars]

STATE	PROJECT	PRINCIPAL INVESTIGATOR	PI AFFILIATION	FISCAL YEARS—		
				1999	2000	2001
	Other Projects					
Alabama [6]	Southeast Regional Assessment	J.F. Cruise (cruise@uah.edu)	UAH	300.0	300.0	300.0
Alabama [6]	Economic Impact of Water Allocation on Agriculture in the Lower Chattachoochee River Basin.	J.F. Cruise (cruise@uah.edu)	UAH	150.0	100.0	150.0
Alabama [6]	Flood Damage Prevention using Remotely-sensed Data and a Mesoscale Atmospheric Model.	J.F. Cruise (cruise@uah.edu)	UAH	150.0	100.0	100.0
Arizona [6]	Agriculture Applications Research	Chuck Hutchinson (chuck@ag.arizona.edu)	Univ. of AZ	200.0	140.0	200.0
Arizona [6]	Space/Land Grant Geospatial Technology Extension	Barron Orr (barron@ag.arizona.edu)	Univ. of AZ	150.0	100.0	150.0
California [6]	Pest Control in Precision Farming using Hyperspectral Imaging.	Nahum Gat (nahum@oksi.com)	OKSI	300.0	300.0	.....
California [6]	Agriculture Industry-Oriented EOCAP–SAR Study	James Tatoian (tatoan@rdl.com)	R&D Laboratories	300.0	300.0	300.0
California [6]	Hyperspectral Detection of Nitrogen Stress in Vegetable Crops: A Case Study in the Salinas Valley of Monterey County, California.	Lee Johnson (ljohnson@mail.arc.nasa.gov)	CSU Monterey Bay	200.0	204.5	.....
California [6]	Commercial Utilization of SAR Data for High-Frequency Coastal Zone Monitoring with Multi-user Application.	Jan Svejkpovsky (jan@oceani.com)	Ocean Imaging	251.1	252.2	174.1
California [6]	Improving Understanding Role of ESE Data by Public and Private Applications Researchers, Potential Commercial Applications of ESE Data; Remote Sensing Curricula Development.	Jack Estes (estes@geog.ucsb.edu)	UCSB	500.0	390.0	390.0
California [6]	State and Local Applications Workforce Development	Chris Lee (ctlee@research.csudh.edu)	CSU, Dominguez Hills	100.0	150.0	150.0
California [6]	Flood Plain Modeling Based on Data Fusion of Polarimetric SAR Interferometry and Laser Altimetry.	Van Zyl (jakob.j.vanzyl@jpl.nasa.gov)	JPL	100.0	100.0	100.0
California [6]	Thermal IR Remote Sensing for Reducing Landslide Hazards in Southern California.	Sabins	Bing Yen & Assoc	100.0	100.0	100.0
California [6]	InSAR Measurements of Crustal Deformation from Large Rockbursts in Mines.	Mariana Eneva (meneva@maxwell.com)	Maxwell Technologies Sys. Div.	100.0	100.0	100.0
California [6]	Development of a Fully Three-Dimensional Model of Interacting Fault Systems for Interpretation of GPS and InSAR Observations.	Donnellan	JPL	190.0	190.0	190.0
California [6]	CASSANDRA: A Storm Based Model for Forecasting the Initiation and Runout of Debris Flows.	William Dietrich (bill@geomorph.berkeley.edu)	UC Berkeley	110.0	110.0	110.0

Colorado [6]	EOCAP–SAR: Land Cover Classification and DEM's for Telecommunication Tower Siting.	Russ Cowart (rcowart@i3.com)	I3-Information, Integration & Imaging.	299.8	299.4	300.0
Colorado [6]	Application of Airborne Hyperspectral Data to Characterization of Mined Lands and Analysis of Associated Watersheds and Impacts for Environmental Management.	Phoebe Hauff (pusa@rmi.net)	Spectral International Inc.	275.0	300.0	.....
Colorado [6]	SARMap GIS Information Package	David Cohen (cohen@vexcel.com)	Vexcel Corp	299.3	299.8	297.8
District of Columbia [6]	Interagency Research Program in Environmental Health	Nancy Maynard (seawifs.gsfc.nasa.gov)	NASA/GSFC	250.0	.....	.....
District of Columbia [6]	Landslide Modeling and Forecasting Utilizing Remotely Sensed Data (LANDMOD).	Bulmer (mbulmer@ceps.nasm.edu)	Smithsonian Institution.	87.0	96.0	72.0
Indiana [6]	Increasing Public Benefits of Existing NASA Earth Sciences Data: Multipurpose Applications in an Agricultural Watershed.	Bernie Engel (engelb@purdue.edu)	Purdue University	100.0	60.0	100.0
Kansas [6]	Development of Agriculture, Land Use Mapping and Monitoring Protocol for the Great Plains.	Kevin Price (k-price@ukans.edu)	Univ. of KS	150.0	150.0	150.0
Kansas [6]	The Great Plains Regional Earth Science Applications Center (GP–RESAC): A Consortium to Transfer Remotes Sensing Products and Technology to Support the Great Plains Agroecosystem.	Edward Martinko (e-martinko@ukans.edu)	Univ. of KS	[5]1,550.0	.....	.....
Maryland [6]	AVHRR Support to Health Researchers	Compton J. Tucker (compton@kratmos.gsfc.nasa.gov)	NASA/GSFC	300.0	200.0	na
Maryland [6]	Development of a Health Archive at the Goddard Global Change Data Center.	Steve Kempler (kempler@daac.gsfc.nasa.gov)	NASA/GSFC	320.0	na	na
Maryland [6]	Baltimore-Washington Corridor Change Detection & Development of Historical Agriculture, Forestry, LU/LC Study.	Tim Foresman (foresman@hq.nasa.gov)	UMBC	200.0	130.0	130.0
Maryland [6]	Direct State and Local Government Participation in NASA Outreach and Applications Activities.	Bill Burgess (wburgess@dnr.state.md.us)	NSGIC	100.0	100.0	100.0
Michigan [6]	Commercial Use of Orbital SAR for Renewable Resources—The Timber Industry: Product Development and Market Assessment.	Craig Dobson (dobson@umich.edu)	EnviSense Corp	299.8	300.0	300.0
Michigan [6]	Monitoring and Prediction of Coastal Oceanic Processes Utilizing High Resolution SAR Imagery.	Darren Miller (dmiller@erim__int.com)	ERIM Int'l	300.0	300.0	300.0
Montana [6]	Validation of High-Resolution Hyperspectral Data for Stream and Riparian Habitat Analysis.	Robert Crabtree (yes@yellowstone.org)	Yellowstone Ecosystem Studies.	300.0	300.0	.....
Nebraska [6]	Application of Hyperspectral Data for Site Specific Farm Management.	Paul Doraiswamy (pdoraisw@asrr.arsusda.gov)	USDA–ARS	268.2	275.7	.....
New York [6]	Water Quality Monitoring with Hyperspectral Imaging	Rulon Simmons (rulon.simmons@kodak.com)	Eastman Kodak	300.0	300.0	.....
New York [6]	Kodak Earth Imaging: Demand-Driven LightSAR Product Fulfillment.	Elizabeth Frey (svogler@kodak.com)	Eastman Kodak-Commercial & Gov't Systems Div.	300.0	300.0	300.0

[In thousands of dollars]

STATE	PROJECT	PRINCIPAL INVESTIGATOR	PI AFFILIATION	FISCAL YEARS—		
				1999	2000	2001
New York [6]	Landslide Mechanisms and Hazard Assessment in Mountain Regions of the Pacific Rim using SRTM.	Jeff Weissel (jeffw@columbia.edu)	Columbia Univ	167.0	148.0	145.0
North Carolina [6]	Exploitation of Hyperspectral Imagery (AVIRIS) for Water Quality Assessment and Monitoring.	Mark Karaska (mkaraska@discover__aai.com)	Applied Analysis Inc	293.3	299.6	.....
North Dakota [6]	Prototype EOSDIS Extension Project: Extend ESE Data into Agribusiness, K–12 Education.	George Seielstad (gsteielst@aero.und.edu)	UMAC	1,000.0	650.0	1,000.0
North Dakota [6]	Northern Great Plains Regional Earth Science Applications Center.	George Seielstad (gsteielst@aero.und.edu)	Univ. of North Dakota	[5] 1,720.0	.....	.....
Ohio [6]	Applications of Hyperspectral Data	James Riddell (jriddell@mtl.com)	MTL Systems Inc	299.6	299.8	.....
Texas [6]	Commercial Development of Enhanced Products from LightSAR Data for the Wireless and Oil/Gas Industries.	Doran Geise (dgeise@eisyscorp.com)	Earth Info. Sys. Corp	292.6	318.9	278.7
Texas [6]	Development of Surface Deformation Map Products for Humid, Urban Areas using Radar Interferometry.	Ed Biegert (EB723475@msxsepc.shell.com)	Shell Exploration and Production Technology Company.	100.0	100.0	100.0
Virginia [6]	Development of Surface Solar Energy Data Sets for Commercial Applications for Placement of Solar Power Facilities.	Ann Carlson (a.b.carlson@larc.nsa.gov)	NASA/LaRC	125.0	125.0	120.0
Washington [6]	Ocean Current Measurements Using SAR	David Lai (dlai@nwra.com)	NorthWest Res. Assoc. Inc.	172.7	237.3	297.2
Washington [6]	Remote Characterization of Agricultural Crop Stress	Phil Cassady (philip.e.cassady@boeing.com)	Boeing Info, Space & Defense Sys.	300,0	300.0	.....
Washington [6]	SAR-based Decision Support of Forestry Operations	Kenneth Cobleigh (kenneth.a.cobleigh@boeing.com)	Boeing Info, Space & Defense Sys.	300.0	300.0	300.0
Wisconsin [6]	The Midwest Center for Natural Resource Management	George Diak (george.diak@ssec.wisc.edu)	Univ. of WI	[5] 1,500.0	.....	.....

[1] AG NRA.
[2] ESIP (Earth Science Information Partnership).
[3] ESIP and Cooperative Agreements.
[4] Cooperative Agreements.
[5] RESAC—Funded in fiscal year 1999 for three years.
[6] Other.

ADVANCED TECHNOLOGY FUNDING

Question. Please explain how the proposed ATD program, for which $110.7 million is requested in 2001, is used to support specific missions and activities anticipated to be funded in the EOS Follow-on and Earth Probes future missions.

Answer. Three technology programs are involved: the Earth Science Technology Office (ESTO) Program, the New Millennium Program (NMP), and the High Performance Computing and Communications Program (HPCC). Overall program management is accomplished through Enterprise-level strategic technology planning procedures that include comprehensive requirements analysis and investment prioritization processes that fully engage the science and applications communities.

The ESTO project areas are linked to the EOS follow-on missions as well as the Earth Probes by developing the technologies essential to enable the future measurements. ESTO requirements are linked to and approved by the Science and Applications Division Directors. Candidate missions are identified by scientific emphasis, e.g. Global Precipitation Mission or Soil Moisture. Specific examples of ESTO-funded technologies that are directly related to these missions follow:

—*Advanced Technology Initiatives*.—Global Precipitation Mission (e.g. high data rate modulator/demodulators, cross-link components), Tropospheric Winds mission (e.g. convective cooling), NPP (e.g. components for reconfigurable computing). Platform technologies to support Ocean Winds (e.g. light weight, low power electronics, KA-band phased array).

—*Instrument Incubator*.—Sea Surface Salinity and Soil Moisture (e.g. thinned array and mesh antenna); Tropospheric Chemistry (e.g. ozone DIAL, compact hyperspectral sensor), Ocean Topography (e.g. wide swath altimeter, delay Doppler radar)

—*Advanced Information Systems Program*.—Global Precipitation Mission (e.g. high data rate downlinks—Ka-band or optical, inter-satellite cross-links, Internet like inter-satellite communications); Landsat Next (on-board processing), Soil Moisture (e.g. high data rate computational radiation-hard components, intelligent sensor control); Sea Surface Salinity (e.g. high data rate communications, on-board processing).

The NMP is successfully implementing new procedures for identifying and selecting space flight validation missions for critical Earth Science measurement techniques and operational concepts. The EO–3 is intended to demonstrate EOS type measurements from geostationary orbit and it will be launched in 2005. Future NMP demonstrations will be essential as ESE moves to more sophisticated instruments, intelligent spacecraft, complex sensor constellations, and explore new vantage points for space-based Earth observations.

The HPCC has as its program objective to develop supercomputers and associated software tools to increase the ability of scientists to model the Earth's climate and geophysical infrastructure and predict global environment trends. This is accomplished by using high capacity and speed among distributed modeling facilities and thus enables the integration and interoperability of multi-disciplinary models. A goal is to integrate improved model fidelity and interoperability into multi-disciplinary models and to validate results with outputs from satellite sensor data sets from all science missions. Advanced data visualization techniques are also developed through HPCC. Unraveling most of the more complex science questions and applying this knowledge to practical problems will rely on the capabilities enabled through the HPCC investments.

ATD COMPETITION

Question. Please describe the ratio of intramural/extramural funding for all funds identified in the new "Technology Infusion" earth science budget activity in 1999 and 2000, including allocations to all NASA Centers made without the benefit of competition. Please also provide the number of civil servants/JPL contract officials who are involved in earth science ATD activities.

Answer. It should be noted that Technology Infusion is not new scope since it was moved to a new place in the budget structure. The Technology Infusion earth science budget activity includes three major program areas: the New Millennium Program, the High Performance Computing and Communications Program, and the set of project areas grouped under the Earth Science Technology office at GSFC. All three program areas rely heavily on the competitive process to solicit projects. Partnerships and cooperation among industry, academia, and government research labs, including those at NASA, is encouraged in all solicitations. Many of the fiscal year 1999 and 2000 awards included such partnerships. In fact, NASA Centers are often partners with others from outside the agency and significant portions of the funds for such projects go to the non-NASA partners. For definitional purposes 'intra-

mural' means that the funds are primarily obtained by a NASA Center through competition for expenditure. With this definition, the percentages of 'intramural' as a ratio of total technology budget amounts to approximately 11 percent of the total budget for fiscal years 1999 and 2000. Even so, much of the work conducted at the Center through the 'intramural' investment is done with previously competed contract support and agreements with universities. The remaining 89 percent for FYs 1999 and 2000 is awarded to universities, industry and other federal labs, consistent with their technical expertise and technologies they have to offer to meet ESE's strategic objectives through open solicitation and peer review process. The FTEs including JPL staff involved in earth science ATD activities are about 150 and 120, respectively, for fiscal years 1999 and 2000.

ATD COMPETITION

Question. Does Code Y support the directive that 75 percent of all ATD funds should be competed? Please explain.

Answer. As part of a larger effort the Agency is reviewing the methods by which it identifies and solicits advanced technologies especially those at very low Technology Readiness Levels (TRLs). With regard to its own funded technology programs, which tend to focus on higher TRLs to meet ESE's strategic objectives, the Office of Earth Science supports and is implementing the directive that 75 percent of all ATD funds should be competed.

Specifically, under the designation of Technology Infusion, the Earth Science Enterprise conducts its New Millennium, Advanced Technology Initiatives, Instrument Incubator, Advanced Information Systems, and the High Performance Computing and Communications project activities through a higher level of competition than the 75 percent goal established in legislation. Following the first initial years of their existence, the Advanced Technology Initiatives and the Instrument Incubator will increase their level of competition to the fullest extent during fiscal year 2000, bringing the total level of competition for Earth Science advanced technology activities to about 90 percent.

A description of the processes presently in place for conducting the technology infusion competitions is provided below. This broad level of competition helps to ensure that the most applicable competencies and capabilities have ample opportunity to participate in the program through the proposal review process. Utilizing this high level of broad announcements helps to ensure that there is a clear and wide distribution of information regarding the opportunities for participation and a clear communication of the expectations of the types of contributions that are needed to help achieve the objectives of the Enterprise's Strategic Plan. Therefore the applicable core competencies at the NASA Centers have clear information on the opportunities that exist along with ample opportunity to participate in the Earth Science technology infusion activities through the competitive process.

The New Millennium Program (NMP) managed by JPL selects ESE flight projects using a two-step competition. The current EO–3 competition is using this process. The first step is a NRA calling for "measurement concepts" aligned with a technology focus identified by the Associate Administrator for Earth Science (AA). Of the submitted proposals a small number of measurement concepts are recommended by peer review for further study. The AA then selects those to be awarded study funding. For EO–3, four concepts were selected. During the study phase, the study teams are offered the opportunity to identify "enabling technologies" for their concepts. Another competition is conducted to select technology sources for these enabling technologies the winners of which are added to the study teams. At the end of the study phase (usually 6 months), Step 2 takes place when the Step 1 Study Reports are evaluated by Peer-review panels for management and programmatics, science and technology suitability, and cost realism. The AA selects one that then enters a mission development phase.

The 5 percent of the funding that is "assigned" to a specific Center under the New Millennium program is sent to the Jet Propulsion Laboratory to cover the costs of JPL's management expertise for this program effort. It also supports studies that define the most useful technologies to be pursued by the Enterprise to meet its science objectives. Similar to employing JPL expertise in advanced technology for New Millennium, the Earth Science Technology Office (ESTO) at the Goddard Space Flight Center is responsible for the development of the Enterprise's technology strategy. Such expertise also provides management of the Advanced Technology Initiatives, Instrument Incubator, and Advanced Information Systems Technology activities, which are described in the following paragraphs.

For fiscal year 1999 the Advanced Technology Initiatives (ATI) project area managed by the Earth Science Technology Office at GSFC directed the funding to LaRC

to invest in ongoing component technology developments. Funding for ATI in fiscal year 1999 was a transition year for projects formerly in the Cross-Enterprise technology development program managed by OSS. Half of that program was competed and half was directed work at the NASA field Centers. The ATI project area for fiscal year 2000 has been competed at 100 percent. Contracts lasting up to three-year based on annual progress will be awarded for instrument component technologies. The plan for the ATI project area is to reissue competitive NRAs every other year in targeted sensors and sensor web technologies.

The Instrument Incubator Program was competed as a NRA in fiscal year 1999, with up to three year contracts to industry, academia and government agencies. Project success will be based on annual progress reviews. The intention is to compete these instrument systems investments every other year.

For fiscal year 1999 the Advanced Information Systems Technologies funds originated in the Prototype line in the EOSDIS Program. Prior to becoming part of the ESTO Program this prototype line was originally competed through requests for white papers then evaluated using peer review. This project area will be a major component of technology investment in the future. A formal NRA was released in early fiscal year 2000 resulting in 27 awards to teams from industry, academia, NASA Centers, and other government agencies. The Enterprise's approach for developing unique and critical aspects of a distributed systems architecture for information systems will be obtained through this competitive area.

Beginning in fiscal year 2000 the High Performance Computing and Communications Program is using the NASA Cooperative Agreement Notice to select Grand Challenge Applications and Principal Investigators. This is a competitive process. Part of this program (about 25 percent) will be directed at extremely unique opportunities and to fund operation of the computing infrastructure.

SUBCOMMITTEE RECESS

Senator BOND. So with that, the hearing is recessed.

[Whereupon, at 11:22 a.m., Tuesday, April 13, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENTS OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT AND INDEPENDENT AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

THURSDAY, MAY 4, 2000

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

The subcommittee met at 9:34 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Christopher S. Bond (chairman) presiding.

Present: Senators Bond and Mikulski.

NATIONAL SCIENCE FOUNDATION

STATEMENT OF DR. RITA COLWELL, DIRECTOR

OFFICE OF SCIENCE AND TECHNOLOGY POLICY

STATEMENT OF NEAL LANE, DIRECTOR

NATIONAL SCIENCE BOARD

STATEMENT OF DR. EAMON KELLY, CHAIRMAN

OPENING STATEMENT OF SENATOR CHRISTOPHER S. BOND

Senator BOND. Good morning. The Subcommittee on VA, HUD and Independent Agencies will come to order. This is the last but not the least important budget hearing for the subcommittee. It's one which the Ranking Member and I have very great interest.

We're here today to review the fiscal year 2001 budget request of the Office of Science and Technology Policy and the National Science Foundation. We welcome Dr. Neal Lane, who is the President's chief science adviser and Director of OSTP. Also we welcome Dr. Rita Colwell, Director of NSF and Dr. Eamon Kelly, Chairman of the National Science Board.

You and your agencies have been critical to the success of Federal basic scientific research in this country, and we commend you for your vision, for your work, and we look forward to even bigger and better things from you in the future.

As we convene this hearing, we celebrate the Foundation's 50th anniversary this month. Both Senator Mikulski and I, along with other members of the subcommittee, have been strong supporters of the Federal commitment to basic science. It is clear that the Federal investment in research and development has been very posi-

tive, it's been critical for the economic and intellectual growth and well-being of our nation.

Since its creation in 1950 with the support of a fellow Missourian, President Harry Truman, NSF has been responsible for numerous important scientific and technological advances that have benefited our society. NSF-funded research has helped us better understand the origins of the universe, developed what we call the Internet today, which NSF can legitimately claim the fatherhood of, and led to important medical advances such as the MRI.

With this subcommittee's support, NSF has also pushed the boundaries of information technology and biotechnology, two of the fastest growing industries in this country. I am intrigued by the administration's new proposal to invest in nanotechnology. From what I've heard, even though I don't understand it, this new area may lead to innovations that only science fiction writers can imagine.

As many of you know, I have a particular interest in the Federal investment in biotechnology, especially plant biotechnology. I strongly believe that biotechnology and mainly the plane genome research that we've worked on in this committee is imperative in maintaining the long-term sustainability and competitiveness of U.S. agriculture. Further, plant genome research has exciting possibilities for improving human health and nutrition, lessening the impact of damaging chemicals on the environment and meeting the truly human compelling needs of children and families in the less developed countries in the world.

The sad reality, unfortunately, is that hysteria and fear instead of reason seem to be driving the debate surrounding biotechnology. The most recent example is a large potato processor in Idaho, forced no longer to use genetically modified potatoes. It was deeply troubling to me to read that the Idaho company decided to stop using genetically modified potatoes despite their belief that "biotechnology is important for agriculture and providing affordable food." This looks like another case where decisions are being driven by misinformation in reaction to hysteria instead of facts.

As I've said before and I'll continue to say over and over again, it's absolutely critical that we educate the public about biotechnology. Many in the public have legitimate questions about biotechnology, and we need to answer those clearly and in readily understandable terms. It is important that the public understands that genetically modified foods are the most heavily reviewed and tested of our food products, and are subjected to thorough scientific review.

In the words of Dr. Jane Henney, Commissioner of Food and Drugs, "FDA's scientific review continues to show that all bioengineered foods sold here in the United States are as safe as their non-bioengineered counterparts." Let me repeat: They are as safe as non-bioengineered counterparts, and that is a message that has been lost on the American public.

Working together with other policymakers, media, academic leaders, and advocates for the needy, we need you, the three of you there and the people that work with you, to ensure that people have the information to separate fact from fiction. Dr. Lane, Dr. Colwell, Dr. Kelly, you and your colleagues within the administra-

tion must provide a unified voice on the science on which biotechnology is based. I ask your assurances that you will help us in reducing consumer confusion about biotechnology.

We need people to understand that through biotechnology real world problems of sickness, hunger, and resource depletion are being solved. With your active involvement, I trust that reason and not hype will prevail in the debate.

Now to the budget. NSF is requesting a $675 million or 17.3 percent increase in its budget for fiscal year 2001. If enacted and if we can find the money, this would raise NSF's budget from $3.9 billion to almost $4.6 billion. And there's nothing I'd rather do. I appreciate the administration's support for the Foundation and congratulate NSF for receiving such a large budget increase.

Personally I intend to work with my colleagues in the Senate to ensure that they understand the importance of NSF research and hopefully, we can convince them that NSF deserves a strong budget.

That said, the reality is that this will be a very difficult year for the subcommittee. As the Ranking Member and I have suggested, where we stand right now is an impossible situation. We have major funding needs that are priorities and need to be balanced, ranging from medical care for veterans to housing for low-income Americans to emergency assistance for Americans affected by natural disasters, as well as providing vitally needed and important increases in the funding of basic science.

We have a balanced budget for the second year in a row after many years of deficit spending. And any surplus must first be dedicated to the reform of Social Security. I think we all understand that. But we also have the situation where we have advised the chairman of the full committee, and I trust the ranking member of the full committee, that we do not have an allocation that will enable us to do what we must do; and we are going to continue to work over the coming weeks to make sure that we are able to get a budget that can be passed and we hope that it will include enough resources to provide the kind of increase that we personally feel is vastly needed and would be very well spent in NSF.

Notwithstanding the budgetary issues, I have some questions about the Foundation's capacity to handle such a large budget increase, and a number of new complex program responsibilities.

Auditors who have looked at your books have not identified any significant financial or management problems with NSF, but I'm concerned with NSF taking on more responsibilities when its staffing resources have remained flat over the past several years. In NSF's own budget justification, it notes that the level of funding requested for salaries and expenses "essentially covers existing FTEs and operations and has not kept pace with the growth in program activities." That's a flashing light that we need to be discussing more with you.

Count me as skeptical also about the efficacy and effectiveness of multi-agency initiatives. While I support the Information Technology Initiative, I remain concerned that the Foundation may be trying to take on more than it may be able to handle under current circumstances. Like the IT initiative, NSF would be the lead agency for the nanotechnology initiative. I need to hear how NSF is

handling current multi-agency initiatives such as IT, and how IT would be able to handle the additional ones it has proposed in this year's budget.

I also have questions about the large budget allocation for the nano initiative. NSF's budget for this research area would be increased by 123 percent over the fiscal year 2000 spending level. Given that the administration described nanotechnology and nanosciences as newly emerging fields, why did the administration request such a large funding increase? How was this increase determined, and the administration's long-term funding plan for this initiative. Especially compared to what we know are the compelling needs in the existing areas of research, which many people feel are not yet being met.

It's also unclear to me how the administration plans to implement the nanotechnology initiative; how it would be managed, how it would be overseen, what performance measures will be used to judge its success, how will the duplication be avoided among the various agencies, and how will Federal nanoactivities be coordinated with similar private sector activities? Especially I would like to hear what role OSTP will play in the nanotechnology initiative and how it will resolve conflicts between agencies.

Let me be clear on this: before I can support the nano initiative, I will need to be convinced that NSF has been able, effectively to manage the multi-agency initiatives it's currently involved in, especially the IT program; and the administration has a clear and cohesive implementation plan in place.

The last point I raise is the Foundation's support for the institutions and groups that do not receive adequate financial assistance; namely, smaller research institutions.

Let me be blunt: It was disappointing to me that the administration did not request funds for the Office of Innovation Partnerships, which is an important initiative not just to me but to this committee and to Congress, and it was included in last year's appropriations. It is also troubling that NSF's or OMB's decision was to flat-fund the Experimental Program to Stimulate Cooperative Research, or EPSCoR.

Both of these programs are important in assisting those schools that do not have the same clout or private endowment support as the larger schools have. The Federal Government must be an active supporter to help level the playing field and ensure that these smaller schools and their students are not left behind.

We're talking about capacity and capacity building. Where is the capacity? In some instances, it appears that the rich get richer, and the indirect costs build the capacity of those institutions that are clearly the "have" institutions. Is this a smart way to go? Should we continue to move certain schools far ahead of the pack? Should we be providing on a systematic basis capacity for other institutions which could attract the capable scientists and the engineers if they had the infrastructure in place to do so, so that we would broaden the opportunities for more and more areas, particularly more students to participate in and become the leaders we need in science, engineering, and technology for the future. This is something that we're going to have to talk about a good bit, and we need your guidance on this.

Last, I applaud NSF's proposal to assist Tribal Colleges, but I am bothered by the level funding for other minority-serving programs. Frankly, given the budget that's submitted to us, I question the characterization of the president's budget for NSF as "something for everyone." We look forward to working on this program and these problems, with your support, Dr. Colwell and Dr. Lane.

Now having given you all the bad news, let me turn to my distinguished ranking member, Senator Mikulski, for her comments and questions.

Senator Mikulski.

STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. Thank you very much, Mr. Chairman, and I found your opening statement quite interesting. First of all, your passion for science. We're compatible in many ways; the suspicion of bigger bureaucracy and less results, kind of entropic situations come to government. But at the same time, you've been a really wonderful and passionate supporter of science and look forward to working with you in our appropriations.

I really want to welcome Dr. Lane, Dr. Colwell, Dr. Kelly and welcome you with enormous warmth and respect for your contribution to the nation. I just wish our wallet could match our warmth, because I think we could have a quick hearing and move right into discovery and innovation.

One of the I think aspects that I've enjoyed serving on this committee is that Presidents of the United States have not politicized their appointments of both their science advisor and the head of the Science Foundation, as well as the chairman of the board. That whether it was Ronald Reagan, but I worked particularly closely with George H. Bush and now with President Clinton to really know that science is about ideas and not about ideology, and therefore has chosen you to lead this. And I want to thank you for your service to the nation.

Dr. Lane, I knew you as both the head of the National Science Foundation and now working with you in the President's capacity. Dr. Colwell, we go back. Senator Bond, I first met Dr. Colwell when we were working in marine biology in Maryland, and she talked to me about those little germs that could eat litter and clean up the Chesapeake Bay; and I wondered what happened to the germs after they ate that air; would I be having one in my gas tank.

Dr. Colwell was my advisor to hold my very first hearing, on a topic called the Oceans and the Future, and she has been a colleague and an adviser ever since.

Dr. Kelly, your stewardship as the president has been appreciated because if you get all of those scientists, 24 scientists in a room, you're going to get 48 opinions, 96 papers and 200 people who want to be the peer review people.

So we really thank you for your leadership and your stewardship.

I think we are so enthusiastic about the work of both the OSTP as well as the NSF, because the science of today will really be the economic engine of the future. Senator Bond has talked about the request that you've made, and also President Clinton's desire to in-

crease $675 million over last year. This will be really I think significant and also fitting, as NSF celebrates its 50th anniversary.

Fifty years ago Congress debated "how should we have—should we have a national science foundation, and also what should it look like? Vannevar Bush outlined his idea, but he ran into a group in Congress who wanted more applied research. Dr. Bush wanted to make sure this was kind of a national endowment for scientific research.

Congress, in the midst of the cold war and Sputnik, those apprehensions that we were facing, made it specific applied, almost Manhattan-like projects. The National Science Foundation was defeated 5 years in a row in the Congress because of the arbitrary arguments between basic and applied. That argument still continues. One recalls when I call for a strategy research that I was vilified in the scientific community because of my desire to have us have national goals.

Again, I think those are artificial distinctions; and when one looks at science, I want the continuum. And we see now on the multi-agencies like nanotechnology, it will go to the basic of the basic, and then as well goes into the ideas, Dr. Lane, that you've talked about that in a sugar-cube like thing we could put the entire Library of Congress or a supercomputer the size of a teardrop, or the fact that we could have these biosensors in our body, particularly if you have high risk situations where you could go about your work and the doctor could go about monitoring you.

This is really the fabulous potential. So we look forward to the National Science Foundation continuing its really robust and much-needed mission, and not having the continual discussions over basic and applied; but how can we achieve these national goals?

When we began the last century we began with an industrial revolution, and it changed the face of America and it changed the face of the world with America leading the way. We ended this century with the information technology. And again, America has lead the way. So at the start of the 21st century, we need to again focus on what will be the technologies of the new century.

I am particularly interested in the focused initiatives that the NSF has put forth, as well and really very focused on the nanotechnology. My colleague has raised very important issues related to coordination, making highest and best use of each agency and therefore highest and best use of both our intellectual talent and the taxpayer's dollars.

Those issues must be addressed, but I do believe that at this point we need to not rest on our microchips, but really look ahead to the next century and what is the technology that will affect every one of our scientific areas. I believe that truly nanotechnology, it will be the basic tool, like infotec is now a kind of a, if I could, the spinal cord and nervous system for whether it's NIH, NASA, NOAA, whether we're studying inner space, outer space, the mind, the brain, or the heart and soul of what makes our planet and universe tick.

So I'm very interested in advocating nanotechnology, with taking into and answering Senator Bond's concerns.

NSF, though, is the backbone and we cannot—well, we look forward to new and dazzling initiatives, mesmerizing initiatives. We have to remember that NSF is the backbone of science, math, and engineering teaching. Now, we don't have a workforce shortage in this country; we have a skill shortage. And if it had not been the steadfast troubadoring of the Science Foundation on the need for science, math, engineering, we could not now even be filling the many jobs that science has created.

We even want to note the fine role that NSF has played in teacher training, because it's not only in training the Ph.D.'s and the postdocs, but how we get into a classroom K through 12 to make sure that we have the teachers that are trained and excite them about science.

There are many issues that ride before us, and I prefer to explore them in the questions and answers, but again, Dr. Lane, or Dr. Gibbons or the excellent people that President Bush gave us, Dr. Colwell, you and your predecessors, Dr. Colwell. We really I think have had an excellent relationship, but what we want now is the relationship where we helped you get the resources, and you help us get the results. So with that I thank you and look forward to your testimony.

Senator BOND. Thank you, Senator Mikulski, and now I will ask Dr. Colwell to begin.

Dr. COLWELL. Mr. Chairman and Senator Mikulski, I thank you very much for allowing me the opportunity to testify on the NSF budget for fiscal year 2001, and I'm just delighted with the commitment and the passion that both of you share for science, for the potential of technology, biotechnology, information technology, and especially nanotechnology.

I really want to thank you and the subcommittee for your consistent bipartisan support for NSF science and engineering activities. Before I begin my testimony, let me first turn to Dr. Eamon Kelly, Chairman of the National Science Board, for his comments on the NSF Budget Request for fiscal year 2001.

Dr. Kelly.

STATEMENT OF EAMON KELLY

Dr. KELLY. I thank you, Dr. Colwell.

Mr. Chairman, Ranking Member Mikulski, I wish to start off by simply expressing my strong support for the Foundation's request of $4.6 billion for fiscal year 2001. In prior testimony to the committee I have cautioned that the nation commits a fundamental error by underinvesting in fundamental research.

The proposed budget for NSF is a significant step towards remedying this underinvestment. The 21st Century Research Fund reflects the Administration's continuing recognition that research is the keystone of our $8.8 trillion economy and the route to an enhanced quality of life for all of our citizens.

The 17 percent requested increase in NSF is a wise investment in the lifeblood of science and engineering. It should be a priority in budget function 250, and indeed in the whole Federal budget.

Knowledge and inventions emerging today are a tribute to research investment made in past years in a bipartisan spirit. Few predicted the magnitude of impact from the revolutions in genetics

and telecommunications, but the ability of our nation to understand, harness and distribute the fruits of knowledge once again reminds us that science and engineering are long-term, high risk investments, with very high payoffs.

As an economist, I must point out that even in the face of the demonstrably high returns on the basic research investment, conservatively 30 percent, U.S. public and private sectors are underinvesting in basic research. Universal acclaim for the benefits realized from federally-supported basic research has not yet generated commensurate public investment.

In an $8.8 trillion knowledge-based economy, more than 2.8 percent of the nation's GDP should be devoted to R&D. But more significantly, the Federal contribution as a proportion of the U.S. investment is shrinking. Today the Federal Government provides about a third of total R&D funding. A decade ago the Federal share was 46 percent. Three decades ago it was 60 percent.

As for basic research, the research with the highest payoff, the $20 billion proposed investment is less than one-quarter of total Federal R&D, a minuscule proportion of the total Federal budget. It's a nanoscale investment in basic research.

Back then to the budget request for the National Science Foundation. It represents less than 4 percent of annual Federal spending on R&D and amounts to only 15 percent of the Federal basic research budget.

Mr. Chairman, Director Colwell will highlight priorities in the NSF budget. I would observe that one-half of the budget request is for core support to grow the knowledge base. This takes time and resources competitively awarded across a spectrum of disciplines, problems and universities. The Foundation is determined to increase the average dollar amount and the duration of research grants. This will bring both greater efficiencies and needed continuity in investigator's research programs and support of students.

The other half of the Foundation's request identifies specific priorities within a 20 percent increase within the Foundation's Research and Related Activities account. This is an appropriately bold increase in an investment budget. I note that Information Technology Research, Nanoscale Science and Engineering, and Biocomplexity in the Environment are Administration, multi-agency initiatives that NSF will lead.

In particular, the Board's just-issued report, Environmental Science and Engineering for the 21st Century, calls for enhanced support for environmental research, education, assessment, and infrastructure.

Mr. Chairman, I have tried to put the fiscal year 2001 R&D budget request into perspective. Investments in basic science and technology underlie the relationship between productivity and higher standards of living. This makes NSF a major partner in the nation's economic growth.

The long-term high risk, high payoff strategy of the National Science Foundation must be preserved as a catalyst in the Federal R&D budget. The fiscal year 2001 investment budget proposal restores some essential balance to that investment portfolio.

PREPARED STATEMENT

In closing, I wish to commend my colleague, NSF Director Rita Colwell, for her energetic and visionary leadership, and to thank the committee for its support of research and education, especially at the National Science Foundation. I would be pleased to answer any questions after Director Colwell talks.

[The statement follows:]

PREPARED STATEMENT OF EAMON M. KELLY

Mr. Chairman, Ranking Member Mikulski, and members of the Subcommittee, I appreciate the opportunity to testify before you. I am Eamon Kelly, Chairman of the National Science Board and President Emeritus and Professor in the Payson Center for International Development & Technology Transfer at Tulane University.

Since the founding of NSF in 1950, the National Science Board has two roles—governing board of the National Science Foundation (NSF) and national policy body. The latter role operates within a framework of policy guidance established by the Congress and the Administration.

As part of NSF's annual long-range planning and budget process, the Board conducts an intensive review. The Board's approval of the proposed budget seeks to assure the health of the human, disciplinary, and infrastructure base for science and technology; to support new opportunities for the advancement of knowledge; and to make the process of priority-setting responsive to such opportunities. Earlier this year the Board commented on and approved the Foundation's fiscal year 2000–2005 GPRA Strategic Plan.

I appear today, on behalf of the National Science Board, to thank the Subcommittee for its commitment to long-term investments such as those epitomized by NSF's programs in research and education. Today, I would like to comment on how short-term prospects, as represented by the NSF budget request, are vital to our Nation's future.

A TRUE INVESTMENT BUDGET

First, I want to express my support for the Foundation's request of $4.6 billion for fiscal year 2001. The last two years in testimony to the Committee I have cautioned—as an economist—that the Nation commits a fundamental error by underinvesting in fundamental research. The proposed budget for NSF is a significant step in remedying that underinvestment. The 21st Century Research Fund reflects the Administration's continuing recognition that research is the keystone of our $8.5 trillion economy and the route to an enhanced quality of life for all our citizens.

A 17 percent increase in NSF is an investment in the lifeblood of science, engineering, and technology. It should be a priority in budget function 250, and indeed, in the whole Federal budget.

Knowledge and inventions emerging today are a tribute to research investments made years or generations ago in a spirit of bipartisanship. As the President noted at the National Medal of Science award ceremony in March:

"We should all remember that, like the Internet, supercomputers and so many other scientific advances, our ability to read our genetic alphabet grew from decades of research that began with government funding. Every American . . . should be proud of their investment in this and other frontiers of science."

The magnitude of impacts from the revolutions in genetics and telecommunications has always been hard to measure. But the ability of our Nation—not just scientists and engineers—to understand, harness, and distribute the fruits of knowledge once again reminds us that science and engineering are long-term, high-risk investments, with high payoffs. It is with this same sense of anticipation that I would like to comment on the priorities in the NSF budget request.

NSF BUDGET PRIORITIES

Fully one-half of the Foundation's budget request is for "core support" to grow the knowledge base. This takes time and requires a distribution of resources across a spectrum of disciplines, opportunities, and performing institutions. The Foundation continues to seek ways to increase the average dollar amount and duration of research grants. This would bring needed continuity to investigators' research programs and the support of graduate students.

The other half of the request identifies specific priorities representing a 20 percent increase within the Foundation's research and related activities account and a 48 percent increase in major research equipment. These increases are appropriately bold for an "investment" budget:

—Information Technology Research will push the frontiers of high-end computing to expand our computer architecture, storage and retrieval, and network. The Terascale Computing System program will make supercomputing accessible to scientists and engineers across the Nation. And to better understand the social effects of those technologies, a research agenda on ethical, legal, education, and workforce issues will be supported across disciplines and cultures, including the use of technology in marketing goods and services in the global economy.

—Like Information Technology Research, Nanoscale Science and Engineering is an Administration multi-agency initiative that NSF will lead. Nanometer scale—that is, one billionth of a meter to several hundred billionths—enables us to work at the atomic and molecular levels. Such manipulations create boundless possibilities for design of materials, manufacturing, electronics, computer simulations and processes in the environment are virtually boundless. The National Nanofabrication Users Network, university-based research hubs, and small business will all participate in the nanotechnology revolution.

—Biocomplexity in the Environment is an ambitious program to integrate our understanding of dynamic systems ranging from simple organisms to whole ecosystems, from the transmission of waterborne contaminants to global climate change. Construction of a National Ecological Observatory Network, or NEON, will advance exploration of the biology of the planet pole-to-pole.

I am proud to add that the Board recently issued a report on Environmental Science and Engineering for the 21st Century <www.nsf.gov/nsb/documents> that calls for a significant increase in resources for environmental research, education, assessment, and infrastructure. The President's Committee of Advisors on Science and Technology and the National Science and Technology Council has endorsed the report. The intellectual maturity of environmental research makes the timing right to ramp up and sustain a programmatic thrust across agencies. In the Board's view, the environmental arena warrants a five-year growth plan that would more than double NSF's current portfolio. The fiscal year 2001 budget request begins this quest.

NSF-supported Major Research Equipment not cited above includes facilities and instruments ranging from earthquake observational equipment, to the South Pole Station, the Large Hadron Collider and the Millimeter Array. These tools enable research and education to coalesce in networks and centers of excellence. They are the infrastructure for knowledge production and transfer, shared with NSF's partners across disciplines, sectors, and national boundaries.

Finally, new ideas and revolutionary tools require educated and trained people. NSF's 21st Century Workforce initiative addresses the need for developing human resources at all levels of education—formal and informal, in schools, homes, and communities. The importance of teachers and teaching, rigorous content, the use of information technologies, and research on learning are all priorities in the NSF request.

I am convinced that the Foundation understands the role of the Federal Government in K–12 mathematics and science education. The transitions between education milestones and preparation for entry into high-tech workplaces will determine the participation of all Americans in science and technology.

There is no greater challenge than renewal of a skilled workforce. Citizens must be able to use knowledge of science and mathematics in their daily lives. Therefore, a more seamless approach to education K through 16, and especially the role of systemic reform, are continuing policy concerns for the Board. They are discussed in our 1999 report Preparing Our Children: Math and Science Education in the National Interest.

TRENDS AND OPPORTUNITIES

Mr. Chairman, as we view the fiscal year 2001 R&D budget proposal, let's keep the requested increases in perspective. In an $8.8 trillion knowledge-based economy, one can argue that more than 2.8 percent of the Nation's GDP should be devoted to R&D. But the reality is that the Federal contribution as a proportion of the U.S. investment is shrinking.

Universal acclaim for the benefits realized from federally supported research has not yet generated commensurate public investment. Even in the face of the demonstrably high return on basic research investment—conservatively 30 percent—the U.S. public and private sectors are underinvesting in research. The $20 billion pro-

posed investment in Federal basic research represents less than one-quarter of the $85 billion total. This minuscule proportion of the total Federal budget devoted to research indicates a mismatch between our interpretation of the past and our commitment to the future.

I am heartened, however, by recurring headlines in our newspapers linking productivity and the economy. As business investment builds on advances particularly in computing and information processing, the link between productivity and higher standards of living becomes more transparent. Behind the causal relationship lie investments in fundamental science and technology.

As this Committee well recognizes, NSF is a major partner to national productivity and economic growth. Yet its budget represents less than 4 percent of annual Federal spending on R&D. According to the American Association for the Advancement of Science, the NSF request amounts to only 15 percent of the Federal basic research budget. Yet almost one-quarter of all Federal support for basic research conducted at academic institutions comes from NSF, as does one-half of nonmedical research funding.

While more than two-thirds of the national R&D investment today is industry-funded, universities and colleges are the "center of gravity" in producing knowledge, innovation, and trained personnel for our workforce. Without hesitation, all of us here today would acknowledge that research universities have become not only incubators of innovation, but also partners in developing and commercializing products that generate income and hold value for other sectors of the Nation's economy.

PROSPECTS

Mr. Chairman, I cannot stress enough that the long-term, high-risk, high-payoff strategy of the National Science Foundation must be preserved as a catalyst in the Federal R&D portfolio. The fiscal year 2001 budget proposal restores some balance to that portfolio. It is truly an "investment" budget. It is overdue—and needed—but just a start.

I can also assure you that the National Science Board will continue to monitor the Foundation's investments and priority-setting in science and technology to ensure stewardship at its best—fairness, timeliness, and responsiveness to national needs. NSF's first GPRA performance report, Accountability Report fiscal year 1999, provides some important measures of outcome and progress toward goals. In addition, the Board's Science and Engineering Indicators—2000 report, to be released next month, will provide, among other insights, an analytical perspective on how R&D is propelling the productivity now observed in the Nation's economic and employment statistics.

In closing, I wish to commend my colleague, NSF Director Rita Colwell, for her energetic and visionary leadership, and to thank the Committee for its support and oversight of excellence in research and education, especially at the National Science Foundation. I look forward to our future discussions.

BIOGRAPHICAL SKETCH OF EAMON M. KELLY

Eamon Michael Kelly was born in New York City and attended Columbia University from 1960 to 1965, where he earned the master and Ph.D. degrees in economics. Following graduation from Columbia, he joined the Penn State faculty at University Park, Pennsylvania.

In 1968, Kelly was appointed to U.S. government service by the President, serving as Director of Policy Formulation with the Economic Development Administration of the U.S. Department of Commerce. He was later named Special Assistant to the Administrator of the Small Business Administration, where he participated in planning and initiating the federal government's first minority economic development program. Kelly joined the Ford Foundation in 1969 and served as Officer-in-Charge for the Office of Social Development, the Foundation's largest domestic and civil rights division.

In 1977, Kelly served as a special consultant to the U.S. House of Representatives where he participated in drafting legislation that provided a $1.7 billion guarantee to prevent the insolvency of New York City. Later that year he was appointed Special Assistant to the Secretary of the U.S. Department of Labor. In that position, he successfully directed a government-wide investigation of the Teamster's $1.4 billion Central States Pension Fund and led negotiations resulting in the Fund being transferred to private management. After leaving the Labor Department, Kelly returned, at the request of the Secretary of Labor, to direct efforts that led to the end of a nationwide coal strike.

In 1981, he was chosen to serve as the 13th president of Tulane University. In July 1998, Kelly retired as president of the university. Currently, Kelly, whose area of specialized interest is international urban and rural development, holds the rank of professor in the departments of Economics, Latin American Studies, and International Health and Development at Tulane. He is also a founding member of the Payson Center for International Development and Technology Transfer.

Kelly is active on the boards of many professional, philanthropic, civic, and corporate organizations. In 1995, he was appointed by President Clinton to serve on the National Science Board (NSB), the governing body of the National Science Foundation, which sponsors scientific and engineering research, develops and supports educational programs, and helps guide national policy. In 1998, Kelly was elected chairman of the National Science Board. February 2000

STATEMENT OF RITA COLWELL

Senator BOND. Thank you, Dr. Kelly, and we'll now restart the clock for Dr. Colwell.

Dr. COLWELL. Thank you, Mr. Chairman.

The fiscal year 2001 Budget Request for the National Science Foundation, if it's enacted, will help set the stage for a new century of progress through learning and discovery. As you know, it is so important for the nation.

For the coming fiscal year, the request for $4.57 billion represents a very much needed increase, 17.3 percent overall. And over $675 million above the current level. It's all about keeping the United States at the leading edge of learning and discovery. And the headliners in NSF's 2001 request are focused; they are multidisciplinary initiatives. In fact, they're really national priorities. Information Technology Research, Biocomplexity, a 21st Century Skilled Force (instead of just "work force"), and the emerging National Nanoscale Science and Engineering Initiative.

NSF'S FISCAL YEAR 2001 INITIATIVES

Each of the initiatives integrate research across the disciplines of science, engineering and mathematics; and aim at solving many of the challenges facing our society. It is going to require more than individual discoveries. It's going to require integration of knowledge from all disciplines.

Let's take biocomplexity. It seeks no less than a more complete understanding of our complex world and its interactions—physical, biological and social. In fact, describing those interactions, I am reminded of the words of a naturalist, John Muir, who wrote in the 1840s: "When we try to pick out anything by itself, we find it hitched to everything else in the Universe."

One especially promising area in biocomplexity is the study of the earth's crust as a habitat for microorganisms. To illustrate this, I'd like to take us on a very, very brief journey by video to the depths of a sea floor. I am going to show some footage. It was taken with an IMAX camera from inside the submersible, the submarine Alvin.

NSF has long supported Alvin, and we also helped support this filming, part of our public understanding and outreach. It's not yet been seen by the public. The footage was shot at about 30,000 meters in water at a deep sea vent called 9 degrees North, beneath the Pacific Ocean south of Mexico.

The footage will bring the astonishing life of the vents to millions of people who will never be able to descend in a submarine. We'll

see features called black smokers, the mineralized chimneys that tower above the communities of life at hydrothermal vents.

The mouths of the vents spew forth boiling water full of chemicals. These conditions are obviously toxic to humans and to most other life forms. We discovered these communities of living beings some two decades ago, but we're only just beginning to unlock their secrets. And the list of described species inhabiting the vents now is greater than 300, all living in the depths without photosynthesis.

Instead of using the sun's energy, they employ chemosynthesis to oxidize the hydrogen sulfide emerging from the vents. From some of these microorganisms have come enzymes that are now used in the polymerase chain reaction, PCR, and this is a reaction that's used in criminology, it's used in public health, it's used in a variety of ways. These enzymes came from some of these microorganisms around these vents.

Let's visit the vents very briefly.

[A video was shown.]

THE BEGINNING OF NSF

Dr. COLWELL. To me, the black smokers we've just seen are not only metaphorical, but they're literal wellsprings of discovery. There are even suggestions now that these springs could have been the birthplace of all life on earth.

But back on the surface, I'd like to move to another topic, the beginning of NSF. Fifty years ago this month, May 10, 1950 in Pocatello, Idaho, a Missourian, Harry Truman, President Truman, signed Senate bill 247, the act that established the National Science Foundation.

Our nation's commitment to science, engineering and education can be seen from the very beginning of the republic. The motto on America's first coin, for example, minted in 1792, read: Liberty, parent of science and industry.

Now that motto has just as much meaning today in the 21st Century as it did in 1792 in an era before the advent of the steam engine. Individual scientists and engineers, supported by NSF and other Federal agencies, are using their talent and their freedom to create, discover and innovate; and now many of these scientists and engineers are moving from the universities into the private sector.

This transfer to the private sector of people, researchers and students, first supported by NSF and universities, should be viewed as the ultimate success of technology transfer. These talented scientists and engineers are part of the new wave of entrepreneurs creating enormous wealth in areas like information technology, biotechnology, and now we will see in the future, in nanotechnology.

BIOTECHNOLOGY

In biotechnology, for example, the next generation of plant scientists are being educated at universities across the nation. This is made possible through NSF's significant investment in plant genome research. These young scientists, both graduate and undergraduate, are also working closely with industry, enabling U.S. world leadership in plant science. And for fiscal year 2001, our request for the plant genome research will total $102 million. This

represents an increase of over $22 million, or 25 percent over fiscal year 2000.

NANOTECHNOLOGY

Nanotechnology, Mr. Chairman, is a newly emerging field where scientists and engineers are beginning to manipulate matter at the atomic level, literally moving atoms around. This Lilliputian technology has the potential to revolutionize nearly every facet of our economy and our lives.

Just some of the things that researchers envision: molecular computers. Yes, Senator Mikulski, the size of a teardrop with the power of today's fastest supercomputers. Nanochips that simulate the electrical activity of a normal nerve synapse, holding great promise for developing better prosthetic devices for artificial limbs. In fact, we may even see a "spinal bypass" from the brain to below the spine where a lesion occurs, so that Christopher Reeve can walk again.

We see micromachined needles with very sharp tips of less than a micrometer across. Such tiny needle tips can pierce the skin easily and without pain, another new method of drug delivery.

Industry as well as other Federal agencies will be looking to our universities for the scientists and the engineers skilled in nanotechnology, and that's why I cannot overstate the importance of the NSF investment in the education of future nano-scale scientists and engineers.

Now that trend has not gone unnoticed by industry. Leaders like Alfred Berkley, President of the NASDAQ stock exchange; CEOs like Norm Augustine of Lockheed, and 47 members of the Council on Competitiveness have all issued statements about the importance of the NSF investments in basic research. I've attached copies for the record.

[The information follows:]

[From the Washington Post, April 30, 2000]

TEST SHOWS STUDENTS CAN'T DO THE MATH; 64 PERCENT FAIL FINAL EXAM AFTER MONTGOMERY STANDARDIZES GRADES

(By Brigid Schulte)

Almost two-thirds of all Montgomery County high school students flunked the final Algebra I exam in January, the first time the school system imposed a standard grading scale for the test.

The failure rate is more than double last year's, when passing scores varied wildly from school to school and, some officials said, masked the real problems in the "world class" system that for years had allowed schools to set their own grading scales on the test.

Based on a new uniform scale that set 60 as the minimum passing grade, a full 64 percent of all students taking the first semester Algebra I final exam in January flunked. The failure rates were higher for African American and Latino students: 80 percent of students in each group flunked the test, reflecting a "pattern of underachievement," Superintendent Jerry D. Weast wrote in a memo to board members.

Fifty percent of white students failed the test, as did 54 percent of Asian American students.

Weast said the results, while disappointing, "tell me exactly what I anticipated: They didn't do well. This is the truth." The explanations, he said, are that teachers don't have enough training, students aren't properly prepared in middle and elementary school and the math curriculum is a problem.

Because Montgomery's Algebra I exam is modeled on the upcoming state high school graduation tests, the high failure rates raise questions about county students' prospects for passing the tough new state exams.

"I'm obviously alarmed and unhappy," said board member Reginald M. Felton (Northeastern County). "Eighty percent failure rates say that we, as a system, are failing our students. That's unacceptable. We can't simply raise standards without investing to support these classrooms."

Last year, when the countywide Algebra I final exams were graded on a curve, as they had been for years, the cut-off score for a passing D grade varied among high schools—from a low of 33 at Kennedy High School to a high of 58 at Wootton. Only 29 percent of county students failed the final exam.

This year, although 64 percent of the students failed the Algebra I final exam, 79 percent actually passed the course because the exam counts for only one-fourth of the total grade.

"This is really startling," said board member Mona M. Signer (Rockville-Potomac). "I expected the failure rate to be higher with the new standard, but not this high. This really points to the need for remediation."

Last year, school board members were shocked to learn that for nearly 20 years, the school system had allowed individual schools to determine their own grading scales. As a result, an A at one school was a D at another.

Concerned about rampant grade inflation, board members called for a uniform grading standard across the county for the exam. The variance in scores, many said, may have made the system look good, but it masked what was really going on. "We were camouflaging our performance," Felton said.

To address the high failure rates, Weast had proposed spending almost $650,000 on teacher training, a three-week summer school program and six algebra master teachers to work with staff. But those programs were cut from Weast's budget proposal by County Executive Douglas M. Duncan (D).

Weast and board members are lobbying the County Council to restore funding for these and about $16 million worth of other programs before the budget is finalized in May.

"This is a solveable issue," Weast said. "I'm not blaming the principals, and I'm not blaming the schools. But clearly we've got to help the classroom teacher."

Weast did take issue with the so-called Algebra Initiative of a year ago that lowered class-size ratio to 1 to 20.

"You can't just give someone a lower class size, pat them on the head and say, 'Go.' There was no training, there was no defined curriculum or defined testing."

To that end, board members have contracted with education consultants Phi Delta Kappa to audit the math curriculum. Out of frustration, Weast said, he moved money around to pay for the audit this year instead of next year.

"We couldn't wait for another year of failure as we get closer to 2005, when kids have got to pass the Algebra I exam to graduate from high school," Weast said.

Perhaps the most troubling test results come from Einstein High, a diverse Silver Spring school where 90 percent of the 256 students taking the final exam failed it. For Hispanic students, the failure rate was 99 percent, compared with 48 percent last year.

"This is outrageous," said Hector Lazo, who formed Latinos Unidos to fight for the uniform standards on the exam. "It makes me feel like I've worked for nothing. If 90 percent of the students are failing, the teachers aren't doing their work."

Einstein Principal Richard L. Towers said he has hired bilingual aides to work with students who don't speak English well or who have had interrupted educations but added that teachers need more training and some students need extra help. The high failure rates show where the need is, he said.

"We need to know what the situation is, and not disguise it, by having everyone on a consistent grading scale," he said. "Now we're at least better able to describe the problem."

FAILURE RATE SOARS

Montgomery County high school students' failure rate on the countywide Algebra I exams skyrocketed this year—the first time that the public schools imposed a standard grading scale for the tests. Under the new scale, students must get at least 60 percent of the questions correct to pass the exam. In previous years, individual schools set their own passing grades. Countywide, 80 percent of all black and Hispanic students, 50 percent of whites and 54 percent of Asian American students failed.

High school	Percentage		
	1999 Algebra I passing scores	1999 failure rate	2000 failure rate
Bethesda-Chevy Chase	56	40	65
Montgomery Blair	48	58	84
James Hubert ''Eubie'' Blake	48	37	78
Winston Churchill	57	11	24
Damascus	58	30	41
Albert Einstein	35	43	90
Gaithersburg	49	22	69
Walter Johnson	49	19	61
John F. Kennedy	33	28	72
Col. Zadok Magruder	54	22	49
Richard Montgomery	50	94	62
Northwest (ninth grade)	46	19	78
Paint Branch	50	23	40
Poolesville	47	29	55
Quince Orchard	46	26	58
Rockville	50	27	73
Seneca Valley	50	47	85
Sherwood	40	19	74
Springbrook	45	36	71
Watkins Mill (ninth grade)	52	25	61
Wheaton (ninth grade)	41	34	81
Walt Whitman	55	17	29
Thomas S. Wootton	58	15	29

SOURCE: Montgomery County Public Schools.

PREPARED STATEMENT OF ALFRED R. BERKELEY, III, PRESIDENT, NASDAQ STOCK MARKET, INC.

Increasing funding for the National Science Foundation is one of the most important components of the Administration's campaign to ensure America's continued economic growth. Historically, we have seen that discoveries made in the science and engineering arenas have propelled our economy forward by paving the way for breakthroughs in technology that in turn spawn entirely new industries.

A relatively small government agency, the National Science Foundation played a key role in setting the stage for today's economic expansion that has created millions of jobs and improved the quality of life of many Americans. Research carried out 10, 20, even 30 years ago in the areas of biotechnology and telecommunications, to name a few, laid the foundation for the most vibrant sectors of the economy today-the same ones that have propelled the dramatic growth of The Nasdaq Stock Market.

As much as history has demonstrated the important role science research plays in our continued economic success, the fact is, Federal support for such programs has declined precipitously in recent years. The Administration's new proposal seeks to reestablish such research as a national priority and the Foundation will put these new funds where they will be most beneficial to the public-at the frontiers of science and engineering research.

PREPARED STATEMENT OF NORMAN R. AUGUSTINE, CHAIRMAN, EXECUTIVE COMMITTEE, LOCKHEED MARTIN CORPORATION BOARD OF DIRECTORS

The Administration's proposal to increase funding for the National Science Foundation comes not a moment too soon. Scientists and engineers in almost every field are close to new discoveries that could transform the way we live and work, and sustain our current prosperity well into the future. We should seize this opportunity to strengthen U.S. leadership in science and technology.

There can be little doubt that advances in science and technology have fueled the current economic expansion. Over the years, the National Science Foundation's public investments in basic research—cross all disciplines in science, engineering and mathematics—have laid the foundation for the most dynamic and innovative science and technology enterprise in the world.

Investing in people is just as important as investing in ideas. The National Science Foundation has supported generation after generation of the young scientists and engineers who train in our university and college research laboratories. Increased funding would boost this support and help build the highly skilled workforce required in the new knowledge-based economy.

If the recent past is a guide, some of these young scientists and engineers will assure that America's established companies remain strong. Others will launch the start-up companies that will help fire economic progress well into the future. And some will be the Nobel laureates of the 21st Century. That's a winning proposition for the Nation—one we can be proud of and one that deserves our support.

COUNCIL ON COMPETITIVENESS URGES CONGRESSIONAL LEADERS TO INCREASE FEDERAL FUNDING FOR SCIENCE & TECHNOLOGY IN FISCAL YEAR 2001

47 members of the Council on Competitiveness, including CEOs of some of America's largest corporations, presidents of major U.S. universities, and prominent labor leaders, signed a letter to Congressional leaders advocating long-term investments in America's science and technology enterprise that will strengthen U.S. competitiveness and assure future economic prosperity.

The attached letter was delivered to Senate Majority Leader Trent Lott, Senate Minority Leader Thomas A. Daschle, Speaker of the House J. Dennis Hastert and House Minority Leader Richard A. Gephardt.

LETTER FROM THE COUNCIL ON COMPETITIVENESS

MARCH 22, 2000.

Hon. TRENT LOTT,
U.S. Senate Majority Leader.

Hon. J. DENNIS HASTERT,
Speaker of the House of Representatives.

Hon. THOMAS A. DASCHLE,
U.S. Senate Minority Leader.

Hon. RICHARD A. GEPHARDT,
U.S. House of Representatives.

As you and your colleagues shape America's budget priorities for 2001, the undersigned members of the Council on Competitiveness urge you to strengthen America's science and technology enterprise.

Decades of bipartisan congressional investments have contributed decisively to the current U.S. economic boom. These investments created the advances in knowledge as well as the pool of technical talent that underpin America's competitive advantage in information technology, biotechnology, health science, new materials, and many other critical enablers.

Nevertheless, public-sector investments in frontier research have declined sharply relative to the size of the economy. An additional $100 billion would have been invested if the Federal share of such research had been maintained at its 1980 level. Physical sciences, math, and engineering have been particularly affected. The recent ramp up of private sector investment in R&D, while vitally important, is no substitute for the Federal role in creating next generation knowledge and technology.

We are also training fewer and fewer American scientists, engineers, and mathematicians despite soaring demand for these skills. Education and training of scientists and engineers are tied to federally sponsored research performed in the nation's laboratories and universities. When Federal R&D commitments shrink, so too does the pool of technically trained talent, forcing industry and academia to look abroad for skilled knowledge workers.

In this time of prosperity, we ask that you use this year's budget resolution, authorization and appropriations process to start America down the path toward significantly higher long-term investments in our national science and technology enterprise. Your commitment to continued U.S. technological leadership will generate

high-wage jobs, economic growth, and a better quality of life for all Americans for decades to come.

Sincerely,

RAYMOND V. GILMARTIN,
Chairman, Council on Competitiveness, Chairman, President & CEO, Merck & Co., Inc.

F. DUANE ACKERMAN,
Industry Vice Chairman, Council on Competitiveness, Chairman & CEO, BellSouth Corporation.

CHARLES M. VEST,
University Vice Chairman, Council on Competitiveness, President, Massachusetts Inst. of Technology.

JACK SHEINKMAN,
Labor Vice Chairman, Council on Competitiveness, Vice Chairman, Amalgamated Bank of New York.

JOHN YOUNG,
Founder, Council on Competitiveness.

ROGER ACKERMAN,
Chairman and CEO, Corning Incorporated.

PAUL A. ALLAIRE,
Chairman, Xerox Corporation.

RICHARD C. ATKINSON,
President, University of California.

DAVID BALTIMORE,
President, California Institute of Technology.

EDWARD W. BARNHOLT,
President and CEO, Agilent Technologies, Inc.

CRAIG R. BARRETT,
President and CEO, Intel Corporation.

ALFRED R. BERKELEY, III,
President, The Nasdaq Stock Market Inc.

MOLLY CORBETT BROAD,
President, University of North Carolina.

WILLIAM R. BRODY,
President, Johns Hopkins University.

RICHARD H. BROWN,
Chairman and CEO, Electronic Data Systems Corporation.

G. WAYNE CLOUGH,
President, Georgia Institute of Technology.

VANCE D. COFFMAN,
Chairman and CEO, Lockheed Martin Corporation.

JARED COHON,
President, Carnegie Mellon University.

PHILIP M. CONDIT,
Chairman and CEO, The Boeing Company.

L. D. DESIMONE,
Chairman of the Board & CEO, 3M Company.

GARY T. DICAMILLO,
Chairman and CEO, Polaroid Corporation.

SANDRA FELDMAN,
President, American Federation of Teachers, AFL–CIO.
CARLETON S. FIORINA,
President and CEO, Hewlett-Packard Company.
GEORGE M.C. FISHER,
Chairman of the Board, Eastman Kodak Company.
LOUIS V. GERSTNER, JR.,
Chairman and CEO, IBM Corporation.
JOSEPH T. GORMAN,
Chairman and CEO, TRW Inc.
WILLIAM R. HAMBRECHT,
President, W.R. Hambrecht & Co., LLC.
CHARLES O. HOLLIDAY, JR.,
President & CEO, E.I. du Pont de Nemours & Company.
SHIRLEY ANN JACKSON,
President, Rensselaer Polytechnic Institute.
IRWIN M. JACOBS,
Chairman & CEO, QUALCOMM, Inc.
DURK I. JAGER,
Chairman, President & CEO, The Procter & Gamble Company.
JERRY J. JASINOWSKI,
President, National Association of Manufacturers.
PETER LIKINS,
President, University of Arizona.
RICHARD A. MCGINN,
Chairman and CEO, Lucent Technologies, Inc.
PATRICK J. MCGOVERN,
Chairman of the Board, International Data Group Inc.
HENRY A. MCKINNELL,
President and CEO, Pfizer Inc.
MARIO MORINO,
Chairman and CEO, Morino Group.
MICHAEL E. PORTER,
Professor, Harvard University.
HEINZ C. PRECHTER,
Chairman, ASC Incorporated.
ERIC SCHMIDT,
Chairman and CEO, Novell.
DAVID E. SHAW,
Chairman, D. E. Shaw & Co., LP.
FREDERICK W. SMITH,
Chairman. President & CEO, FDX Corporation.
MICHAEL T. SMITH,
Chairman and CEO, Hughes Electronics Corporation.
RAY STATA,
Chairman of the Board, Analog Devices, Inc.
GARY L. TOOKER,
Vice Chairman of the Board, Motorola Inc.
G. RICHARD WAGONER, JR.,
President & CEO, General Motors Corporation.
MARK WRIGHTON,

Chancellor, Washington University.

Dr. COLWELL. Mr. Chairman, I've mentioned headliners. In NSF's 2001 request, there are four focused initiatives, but nearly half our requested increase, as pointed out by Chairman Kelly, $320 million will support what we call the core activities. It will help us with our biggest challenge; strengthen the core disciplines of science and engineering, while moving forward in the interdisciplinary focus priority areas.

NSF'S EDUCATIONAL FOCUS

I mentioned earlier NSF's role in helping educate the future scientists and engineers. But that's just part of the story. If all of our efforts depend on work force, a skill force that is literate in science and technology, we must address science and mathematics education for all students at all levels, pre-K to graduate and beyond.

And it's no secret that our schools are not preparing children adequately in science and math. No region of the nation is immune. I was dismayed to read in last Sunday's Washington Post that 64 percent of the high school students in Montgomery County failed the standard Algebra 1 exam. This cannot continue if the United States seeks to maintain world leadership in science and technology.

If you are commonly driven by knowledge and ideas, how you prepare a work force, a skill force is paramount. NSF is committed to providing leadership in this critical area.

NSF'S INVESTMENT IN NEW TOOLS

Mr. Chairman, let me just mention very briefly two new stocks in our investment in tools. In the Major Research Equipment account, we will add $45 million for two new starts, and to provide increases to ongoing projects. One is NEON, the National Ecological Observatory Network, and this is a pole to pole network, arctic to antarctic, with the state of the art infrastructure of platforms and equipment, to enable 21st Century science and engineering based ecology and biocomplexity research.

Another new start is EarthScope, which is an array of instruments that will allow scientists to observe earthquake and other earth processes like volcanic eruptions, at a much higher resolution with greater predictability.

NSF'S ADMINISTRATION AND MANAGEMENT REQUEST

Finally, we also mention our requested investment in excellent, high quality staff, and the cutting-edge technology that's needed to keep NSF's internal operation strong and responsive.

Through our request for Administration and Management, we are confident that the Foundation can continue its commitment to scientific excellence and to the sound stewardship of the public's resources.

CLOSING REMARKS OF DR. COLWELL

Mr. Chairman, since its founding 50 years ago, the National Science Foundation has been a very important and vital catalyst for discovery and innovation. Our 2001 budget request reflects the

lessons of this history. It focuses on national priorities, as it should, but it also recognizes that one of our highest national priorities must always be to remain at the leading edge of science and engineering research and education across the board.

PREPARED STATEMENT

So the requested increase of over 17 percent provides investment that is clearly in keeping with the wealth of opportunity that science and engineering provides society. In addition, it positions America to remain a world leader in the knowledge-based economy of the 21st Century. Thank you.

[The statement follows:]

PREPARED STATEMENT OF RITA COLWELL

Mr. Chairman, Senator Mikulski, members of the subcommittee, thank you for allowing me the opportunity to testify on NSF's budget request for fiscal year 2001. I want to begin by thanking you and the subcommittee for your consistent, bipartisan support for NSF's science and engineering activities.

The fiscal year 2001 budget request for the National Science Foundation if enacted, would provide the largest dollar increase the Foundation has ever received. This investment will help set the stage for a new century of progress through learning and discovery.

For the coming fiscal year, the NSF requests $4.57 billion dollars. This represents a much needed increase—17.3 percent overall—over $675 million above the current level. This investment is part of the President's 21st Century Research Fund for America, and it is all about keeping the United States at the leading edge of learning and discovery.

The headliners in NSF's 2001 request are four focused, multidisciplinary initiatives. In fact, they are really national priorities: Information Technology Research, Biocomplexity, 21st Century Workforce and the emergent National Nanoscale Science and Engineering Initiative.

Each initiative integrates research across the disciplines of science, engineering and mathematics. Solving many of the challenges facing our society will require more than individual discoveries. It will require the integration of knowledge from all disciplines.

Biocomplexity—for example—seeks no less than a more complete understanding of our complex world and its interactions—physical, biological and social.

In describing these interactions, I am reminded of the words of the naturalist John Muir. He wrote: "When we try to pick out anything by itself, we find it hitched to everything else in the universe."

Up to now, we have sought understanding by taking things apart into their components. Now, at last, we begin to map out the interplay between the parts of complex systems.

One especially promising area in Biocomplexity is the study of the Earth's crust as a habitat for micro-organisms.

To illustrate this I would like take us on a very brief journey by video to the depths of the sea floor.

The footage we will see was taken with an IMAX camera from inside the submersible Alvin. NSF has long supported Alvin, and we also helped to support this filming.

Not yet seen by the public, this footage is part of a proposed film about deep-sea hydrothermal vents being produced by Stephen Low Productions in collaboration with the Rutgers Institute of Marine and Coastal Sciences and Woods Hole Oceanographic Institution.

It was shot at a deep-sea vent called "9 Degrees North" in the Pacific Ocean south of Mexico. The film will bring the astonishing life of the vents to millions of people who will never be able to descend in a submarine.

We will see features called "black smokers"—the mineralized chimneys that tower above the communities of life at hydrothermal vents.

The mouths of the vents spew forth boiling water full of chemicals. Such conditions are obviously toxic to humans and to most other life-forms.

We first discovered these communities some two decades ago but we are only beginning to unlock their secrets. The list of described species inhabiting vents now tops 300. All living in the depths without photosynthesis.

Instead of using the sun's energy, they employ chemosynthesis to oxidize the hydrogen sulfide emerging from the vents. [black smoker footage]

To me the black smokers we have just seen are not only metaphorical but literal wellsprings of discovery. There are even suggestions that these springs could have been the birthplace of all life on Earth.

Back at the Earth's surface, I'd like to move to another origin, the beginning of NSF. Fifty years ago this month—May 10th, 1950 to be exact—President Truman signed S. 247—the act that established the NSF.

Our nation's commitment to science, engineering and education did not begin in 1950. This commitment can be seen from the very beginning of the nation. The motto on America's first coin for example—minted in 1792—read: Liberty: Parent of Science and Industry.

That motto has just as much meaning today—in the 21st century—as it did in 1792, in an era before the advent of the steam engine. Individual scientists and engineers—supported by NSF and other federal agencies—are using their talent and their freedom to create, discover, and innovate.

Increasingly these scientists and engineers, and perhaps even more important their students—are also making the jump to the private sector.

This transfer to the private sector of people—first supported by NSF at universities—should be viewed as the ultimate success of technology transfer. These talented scientists and engineers are part of the new wave of entrepreneurs creating enormous wealth in areas like information technology, biotechnology, and now in nanotechnology.

Nanotechnology—Mr. Chairman—is a new, emerging field where scientists and engineers are beginning to manipulate matter at the atomic level. Taking a cue from biology, researchers across disciplines are beginning to create nanostructures smaller than human cells.

This "Lilliputian" technology has the potential to revolutionize nearly every facet of our economy and our lives. For example:

—Researchers envision building electronic circuits from the bottom-up, starting at the molecular level. In the future researchers may be building molecular computers the size of a tear drop with the power of today's fastest supercomputers.

—Combining microelectronics and neural research holds great promise for developing prosthetic devices for artificial limbs. Researchers are creating nanochips where nerve axons can regrow through the tiny grate in the center a silicon membrane. These chips then modify and distribute the nerve impulses, simulating the electrical activity of a normal nerve synapse.

—Researchers are already developing micromachined needles with sharp tips of less than a micrometer across. Such tiny needle tips can pierce the skin easily and without pain—a novel new method of drug delivery.

There are many more innovations—most occurring in the past year or so. We are also already seeing a substantial amount of industry-university partnerships in nanoscale science and engineering. Industry, as well as other federal agencies like NASA, DoE and DOD will be looking to our universities for the scientists and engineers skilled in nanotechnology. That is why I cannot overstate the importance of NSF's investment in the education of future nanoscale scientists and engineers.

The transfer of scientists and engineers to the private sector can probably best be seen in the Information Technology sector. Everyday we read a news story touting the latest Internet whiz kid or biotechnology IPO. David Ignatius—in a recent column in the Washington Post—wrote about a 27-year old Stanford graduate student with a smart business plan and a hot Internet search engine with the strange name of Google.

The offbeat name is actually a reference to the complex math—actually a series of mathematical algorithms—that makes the search engine work. It involves over half a billion variables in its complex calculations. The mathematical term googol represents 10 to the 100th power.

Google the company is an excellent example of knowledge transfer from NSF investments in people. Both of the company's two founders were computer science grad students at Stanford who studied under an NSF-funded faculty member. One of the founders received an NSF Graduate Research Fellowship. Google's Vice President of Engineering is a computer science professor at the University of California at Santa Barbara and recipient of a prestigious NSF CAREER award.

Google is a great example of how fundamental research in an area like mathematics acts as the lifeblood of the IT revolution. It also shows how the unparalleled innovation system in the U.S. can quickly exploit new ideas developed in university labs and bring them to market.

This example is really just the latest in a string of NSF successes. The underlying technology for nearly all major search engines found on the web today—including

Lycos, Excite, Infoseek, Inktomi and specialized search engines like Congress's own THOMAS—all were begun created through NSF-funded research at universities.

This trend hasn't gone unnoticed by industry. Now leaders like Alfred Berkeley, the President of the NASDAQ Stock Market and CEO's like Norm Augustine of Lockheed talk about the importance of the NSF's investments in basic research. I've included as an attachment statements they made earlier this year on the importance of NSF's investments to industry. I've also attached the recent statement by the Council on Competitiveness, which was co-signed by CEO's and other industry executives.

Mr. Chairman, NSF has recently developed a strategic plan that reflect our role in the innovation process. The investments proposed in our fiscal year 2001 budget were crafted to address three strategic goals for the Foundation. They are:

Ideas.—This includes research at and across the frontier of science and engineering, and connections to its use in service of society.

People.—We've always said that every NSF dollar is an investment in people. We cover kindergarten to career development to continuous learning.

Tools—These are the databases, the platforms, and the facilities that keep us at the leading edge. There are some new starts in here that I will highlight in a moment.

I've already mentioned the initiatives within the fiscal year 2001 budget request. I would also like to note that nearly half our requested increase—$320 million—will support what we call the core activities. It will help us with our biggest challenge: to strengthen the core disciplines of science and engineering while moving forward in interdisciplinary areas.

NSF's investments in cutting-edge mathematics and statistics are a perfect example of how investing in core disciplines will sustain new fundamental discoveries and make interdisciplinary activities run on all cylinders.

The story of Google shows how mathematics has become increasingly important in ITR. We are also seeing impressive contributions to the new and emerging fields of bioinformatics and nano-scale manufacturing. The greatest insights into AIDS have come from mathematical models of disease.

Mr. Chairman, within our core activities, NSF support for plant genome research will increase by $22.5 million to total $102 million in fiscal year 2001. This investment—long championed by you Mr. Chairman and this subcommittee—will help continue US world leadership in plant genomics.

Our investment in the EPSCoR program will increase slightly to $73 million in fiscal year 2001. This includes funding from both the EHR and RRA accounts. NSF has long sought to enable EPSCoR researchers to participate more fully in NSF research activities. Consequently, up to $25 million will be made available from the NSF research account for co-funding.

Mr. Chairman, all of our advances in science and engineering depend upon a workforce that is literate in science and technology. When we talk about the equation for science and society, this is a critical part.

Our request for programs specifically addressing NSF's strategic goal of investing in People—spanning both the EHR and Research Accounts—will increase by 10.8 percent over fiscal year 2000. Within this broader investment, our request for Education and Human Resources represents a 5.5 percent increase over the fiscal year 2000 level.

Highlights include:

—Funding for the Graduate Teaching Fellows in K–12 Education (GK–12) program more than double to $28 million. The GK–12 program supports graduate and advanced undergraduate students in science, math and engineering to be content resources for K–12 teachers.

—The request for the HBCU-Undergraduate Program (HBCU–UP) in fiscal year 2001 is $11 million, an increase of $1.60 million or 17 percent. This reflects a contribution from NSF's research account of $3 million. The fiscal year 2001 request for HBCU–UP will provide continuing support for 14 existing projects and support for up to 4 new awards in fiscal year 2001.

—The request for Advanced Technological Education Program (ATE)—NSF's flagship program for 2-year institutions and championed by the subcommittee—is $39 million, an increase of $10 million or over 33 percent. The ATE program seeks to strengthen the science and math preparation of students in technical fields. This will enable them to better compete in the high-performance workplace in areas such as Information Technology and Manufacturing.

Our nation is in the midst of one of the greatest eras of technological change in human history. In an economy driven by knowledge and ideas, how we prepare our workforce is paramount. NSF is committed to providing leadership in this critical area.

Finally, I mentioned earlier that we have two new starts in our investments in Tools.

One is NEON—the National Ecological Observatory Network: a pole-to-pole network—Arctic to Antarctic—with a state-of-the-art infrastructure of platforms and equipment to enable 21st Century science and engineering-based ecological and biocomplexity research. The MRE request for NEON is $12 million in fiscal year 2001.

The other new start is EarthScope, which is an array of instruments that will allow scientists to observe earthquake and other earth processes like volcanic eruptions at much higher resolution. $17 million is requested for EarthScope in fiscal year 2001.

Mr. Chairman, since its founding fifty years ago the National Science Foundation has been an important and vital catalyst for discovery and innovation. From the information technology revolution to the genomic revolution and everything in between—MRIs, lasers, the Internet, Doppler radar, and countless other innovations—NSF-supported fundamental research has advanced our society.

NSF's fiscal year 2001 budget reflects the lessons of history. It focuses on national priorities, as it should. But it also recognizes that one of our highest national priorities must always be to stay at the leading-edge of science and engineering research and education across the board. Over half of the increased funding is just for that.

The entire NSF investment portfolio sets the stage for a 21st Century research and education enterprise that is focused on national priorities. Guiding all of these activities is the Foundation's longstanding commitment to merit-based investments in learning and discovery that adhere to the highest standards of excellence.

This request marks a significant step forward for U.S. science and engineering. The requested increase of over 17 percent provides a level of investment that is clearly in keeping with the wealth of opportunity that science and engineering provide society. It positions America to remain a world leader in the knowledge-based economy of the 21st Century.

Thank you.

STATEMENT OF NEAL LANE

Senator BOND. Thank you very much, Dr. Colwell. Dr. Lane.

Dr. LANE. Chairman Bond, Senator Mikulski, I am very pleased to appear before you today. I ask that my written testimony, which describes OSTP's budget and the highlights of the administration's fiscal year 2001 R&D budget request be included for the record.

The President and Vice-President have proposed an historic science and technology budget for fiscal year 2001, a budget that is balanced across all important fields of science, engineering and technology. And I cannot emphasize enough how dedicated the administration is to working with you to see this R&D budget enacted.

Bipartisan support for this budget would put our R&D portfolio on an optimum investment trajectory, one that increases research in the core disciplines of science and engineering, technology, across the board, providing balance among the disciplines, and continued prosperity for the 21st Century.

Mr. Chairman and Senator Mikulski, I very much appreciate your passion for science and technology and the strong support that you and others on your committee have given to the Federal R&D programs; and I know that you and I share a commitment to keeping America the world leader in science and technology.

I hope you agree OSTP plays a vital role in leveraging the government science and technology investments for broad national goals.

Within the balanced R&D portfolio, we're coordinating some very important interagency initiatives. In the area of energy, there's a new focus on biofuels, on developing clean, efficient energy technologies for burgeoning international markets, and on strong support for research to improve our domestic housing and clean cars.

We have a targeted effort to understand solutions for environmental policy challenges such as hypoxia, harmful algal blooms and biodiversity loss. We are moving our robust global change research program into understanding carbon uptake and storage, and terrestrial systems, and to take stock of what a changing hydrological cycle might mean for the planet.

We've continued our strong support for education research, and among our efforts to address 21st Century threats, we've proposed a new institute for information infrastructure protection, which is a new partnership with industry.

And as you know, Mr. Chairman, we continue to coordinate efforts in the area of the planned genome, and food safety as well as many others.

I want to highlight just two of our initiatives this morning. The information technology R&D initiative responds to last year's wake-up call from the congressionally-chartered President's Information Technology Advisory Committee, we call PITAC.

OSTP was instrumental in getting the committee established. We also work closely with the committee to make sure that its work would be useful to the Federal agencies while still challenging those agencies to think outside the box about their responsibilities and possibilities in information technology research.

Once we had the PITAC recommendations, OSTP pulled together the Federal agencies to develop a response. We ultimately concluded that information technology is so important that we proposed and you funded new Federal R&D investments. This year we build upon that effort by taking your advice, Mr. Chairman, and the recommendation of PITAC by presenting a single integrated information technology R&D portfolio, which includes the base high performance computing communication programs, including next generation Internet, the new activities established by last year's information technology for the 21st Century Initiative, and the Department of Energy's ASCI program, Accelerated Strategic Computer Initiative.

This year the president has requested $2.315 billion for information technology R&D. That's 35 percent above and beyond our ongoing research programs. Out of this increase, Mr. Chairman, $279 million, nearly half of the initiative, comes through your subcommittee. I hope we can continue to count on your support.

I would also like to highlight OSTP's work on the new initiative in nanotechnology research. OSTP, through the auspices of the National Science and Technology Council, convened an interagency working group to look into the feasibility of a nanotechnology initiative. After the working group finished its work, OSTP recommended that the president's advisory committee, PCAST, convene a panel to review the recommendations of the government body and to advise OSTP and others in the administration on how best to implement their findings.

This effort culminated in the national nanotechnology initiative, which will provide an $225 million increase in the emerging fields of nanoscience and nanoengineering, to nearly double the current Federal investment. Once again, nearly half of this increase will come through this subcommittee. Roughly 70 percent of the new funding proposed under the National Nanotechnology Initiative

will go to university-based research. These investments will help meet the growing demand for workers with nanoscale science and engineering skills.

The administration believes that nanotechnology will have a profound impact on our economy and society in the early 21st Century. Perhaps even comparable to that of information technology, or cellular genetic and molecular biology. And that's in part because nanotechnology advances will support all of these areas as well as many, many other areas of potential application.

I ask today for your continued support for OSTP's role in coordinating science and technology policy for the Executive Branch, and for our nation at large. OSTP's budget request of $5.2 million and 40 FTEs for fiscal year 2001 represents no increase in FTE level and an increase in budget authority of less than two percent. These additional resources are essential to continue to provide the highest quality of work across the broad spectrum of responsibilities.

Mr. Chairman, Senator Mikulski, Members of the Committee, I hope that this brief overview, combined with my written statement, convey to you the extent of this administration's commitment to advancing science and technology in the national interest, and the importance of OSTP's role in that enterprise.

Regardless of party affiliation, in the end we can all agree that investments in science and technology are investments in the nation's future. I look forward to achieving bipartisan support for a national science and technology strategy that will combine the resources of industry, academia, nonprofit organizations and all levels of government to advance knowledge, promote education, strengthen institutions and develop a human potential. And to put our support for science and technology from all these sectors on the trajectory that we need to have for the future of the country.

I ask not only your support for OSTP's fiscal year 2001 budget request, but also want you to know how much I appreciate the long-standing bipartisan support of the committee for OSTP and for science and technology research as an enterprise.

I enjoyed the video on the Alvin. I had the very great pleasure to go down in the Alvin with Congressman Jerry Lewis when he was chair of the VA, HUD subcommittee on the House side, and we were down for five hours looking at the wonders underneath the ocean. And if that's not bipartisan, it's an extraordinary experience—I highly recommend this experience.

PREPARED STATEMENT

That concludes my statement. I'd be very happy to answer any questions you might have.

[The statement follows:]

PREPARED STATEMENT OF NEAL LANE

Mr. Chairman, Members of the Committee, I am pleased to appear before you today to discuss the Office of Science and Technology Policy's (OSTP) budget request for fiscal year 2001.

I very much welcome, and am encouraged by the continued efforts in Congress in support of science and technology (S&T) funding. As you know, funding for S&T, like funding for education, is a high leverage investment in our continued quest for peace and prosperity. Support for such investments has traditionally been a matter of bipartisan agreement. It is imperative that we build common ground in support

of a shared vision—a commitment to keep America the world's leader in S&T. I believe that the President's S&T budget, with your help, will generate the bipartisan momentum to put our R&D portfolio on an optimum investment trajectory that will continue to deliver strong returns on our investment, far into the future. This budget plots a bold course of strategic growth and prosperity through discovery. I look forward to working with Congress on a bipartisan basis to see it successfully enacted.

Mr. Chairman, it has been a remarkable year for science. All of the millennial lists produced by the popular press listed advances in science and technology as some of the top achievements during the last century. Time magazine named Albert Einstein "Man of the Century." And this budget, which proposes a bold Science and Technology Initiative, could be one of the President's—and this Congress's—most important gifts to future generations.

As we turn-the-corner on the new century, it seems appropriate to take stock of the Nation's S&T enterprise, and to look to the future—to the opportunities that lie ahead as well as the challenges that we face. The Information Age, driven by rapidly advancing S&T, is bringing changes to our society that are only beginning to unfold. Already, new communications technologies are transforming the way we work, where we work, and what we need to know to be successful in tomorrow's competitive environment. Six years ago, "Internet" was still a word known mostly to those in S&T. Today, this offspring of federal research activities is the backbone of a new industry and a window to a tremendous world of information for all segments of our society, from business executives to school children.

The rapid economic growth of other nations means a future with greatly expanded markets for U.S. goods and services. Our ability to move our ideas, our goods, and ourselves swiftly to any place on the planet, with the help of new technologies, enhances our ability to share in the growth of global wealth. On the other hand, the increasing availability of these same capabilities throughout the world also means greater competition; it means increasing pressures on our shared environment, health, and natural resources; and it means more diverse dangers to our security from threats such as terrorism and the spread of nuclear and other weapons of mass destruction.

S&T—THE ENGINE OF OUR ECONOMIC GROWTH

Sustaining U.S. leadership in science and technology has been a cornerstone of President Clinton's economic and national security strategy. Investments in science and technology—both public and private—have driven economic growth and improved the quality of life in America for the last 200 years. They have generated new knowledge and new industries, created new jobs, ensured economic and national security, reduced pollution and increased energy efficiency, provided better and safer transportation, improved medical care, and increased living standards for the American people. Science and technology have become the engine of our economic growth.

Our economy has never been more driven by science and technology than it is today. Over the past three years, information technology (IT) alone has accounted for more than one-third of America's economic growth. More than 7.4 million American's work in IT today—and those jobs pay, on average, eighty percent higher than the average job. Alan Greenspan recently stated that rapid technological change has greatly contributed to nine years of record peacetime expansion, with information innovation lying at the root of productivity and economic growth, and is one of the forces producing what he called "America's sparkling economic performance."

Investments in research and development are among the highest-payback investments a Nation can make. Over the past 50 years technological innovation has been responsible for as much as half of the nation's growth in productivity.

We see the fruits of this innovation every day. Many of the products and services we have come to depend on for our way of life in America—lasers, computers, magnetic resonance imaging (MRI), teflon and other advanced materials and composites, communications satellites, jet aircraft, microwave ovens, solar-electric cells, modems, semiconductors, storm windows, human insulin, and others—are the product of U.S. science support and technology policies.

These innovations also mean jobs and economic prosperity for America. They've built some of these key industries:

Computers and Communications.—Federal support of computing and communications research, leveraged by industry and academia, has led to technical advances that are transforming the American economy. Commercialization and expanded use of the new information tools created through these innovative partnerships—which include everything from high speed supercomputing to the Internet—have un-

leashed spectacular economic growth and job creation. Over 800,000 new jobs were created in information technology sectors in the past year alone. These sectors are growing at double the rate of the overall economy and will soon account for 10 percent of the economy.

Biotechnology.—Discoveries in biology, food science, agriculture, genetics, and drugs upon which the private sector has been able to build and expand a world-class industry today support $13.4 billion in annual sales and more than 150,000 American jobs.

Commercial Space Activities.—The U.S. commercial launch rate has tripled since the first half of the 1990s. Revenues from U.S. commercial space launch activities have grown rapidly from $635 million in 1996, to over $1 billion in 1998.

Aerospace.—Aerospace led all other industry sectors in 1999 with $41 billion in net exports. The latest figures show the total aerospace industry sales for 1999 to be $155 billion, employing over 837,000 people. The U.S. Aircraft industry shipped over $54 billion worth of commercial aircraft, up 46 percent from 1997 levels.

Environmental Technologies.—Almost unheard-of 10 years ago, more than 30,000 environmental technology and services businesses employ over 1.3 million Americans in high-growth, high-wage jobs. The environmental technology industry has annual sales over $186 billion, a number that is expected to grow to $214 billion by the year 2002. The environmental technology export market nearly doubled from $9.3 billion in 1993 to $18.9 billion in 1998, directly generating more than 130,000 new jobs in the United States.

Energy Efficiency.—Technology advances, developed in part through public-private partnerships, have cut refrigerator energy consumption from 1900 kWh/year in 1974 to an average today of less than 650 kWh/year, reducing consumer electricity costs by $100/year per refrigerator. A partnership with the glass industry led to the development of the oxygen-fueled glass furnace, which in just 8 years has captured 30 percent of U.S. glass production and provides annual net energy savings of $11 million. Geothermal heat pumps (GHP) reduce energy consumption by 63–72 percent compared to electric resistance heaters/standard air conditioners. Some 400,000 GHPs are now in use in the United States, with estimated annual savings of $120 million to $160 million.

Every one of these industries has been built on federal investments in R&D, and they are not isolated occurrences. From satellites, to software, to superconductivity, the government has supported—and must continue to support—exploratory research, experimentation and innovation that would be difficult, if not impossible, for individual companies or even whole industries to afford.

RECENT ADVANCES IN SCIENCE AND TECHNOLOGY

Over the past year there have been numerous scientific and technological advances, reminding us of how much there is yet to know, and of the potential of S&T to further enrich and improve our lives. It is important to note that federal funding was a key to virtually all of the scientific breakthroughs of 1999, which included:

—*Genomics speeds ahead*.—The feverish pace of discovery in genomics begun in 1998 with the publication of the *Caenorhabditis elegans* nematode genome continued unabated this year. The big story was the first successful sequencing of a human chromosome, and the first two chromosomes of a flowering plant. In addition, researchers polished off the genomes of the fruit fly, *Chlamydia pneumoniae* (microbe which causes respiratory infections), *Campylobacter jejuni* (food-borne pathogen), *Mycobacterium tuberculosis* (a virulent strain of TB), and two chromosomes of *Plasmodium falciparum* (malaria parasite). Progress on sequencing has fueled similar efforts on new technologies to exploit the new information, including DNA chips, microarray gene analyzers, and advanced data processing.

—*Rice of life*.—Genetically engineered crops have long held promise as a way to feed the world's 800 million people who are either hungry or undernourished. Last summer scientists unveiled strains of biotech rice that contain high levels of iron and beta-carotene, a vitamin A precursor. Vitamin A deficiency afflicts 400 million people worldwide, leaving them vulnerable to infections and blindness. Iron deficiency afflicts up to 3.7 billion people, causing anemia and impaired mental function in children. The rice sequence data is being made freely available to the public.

—*We are not unique*.—Once we wondered, but now we know: At least one solar system beyond our own revolves around a sun-like star. Earlier this year researchers discovered a system of at least three planets around the star Upsilon Andromedae, which is 44 light-years away. The giant planets circle around their

sun within the distance of our Mars' orbit—providing new clues about how solar systems may form.

—*Plentiful planets*.—Following only four years after the discovery of the first planet found outside of our solar system, astronomers have raised the total to nearly 30 with a steady stream of new discoveries all year.

—*Making memories*.—Using a new laser microscope technique, researchers have watched the complex, molecular processes that underlie memories in the brain. These studies have identified the function of key receptors in the synapses that modify the connections between neurons and thereby affect how they will behave in the future. Separate, supporting research showed that genetic modification of these receptors resulted in "smart mice" that were better able to learn mazes.

—*New light on photonics*.—Several dramatic developments were made in the effort to make devices that manipulate light or photons the way semiconductor devices manipulate electrons. Based on custom made "photonic" crystals, researchers developed bandgap mirrors, high intensity light guides, and the first photonic crystal laser. The optical counterpart to conventional integrated circuits would result from combining the photonic waveguides and lasers in a single crystal, for possible use as telecommunications circuits and ultra-fast computers.

—*Tracking distant ancestors*.—Geochemists extracted and identified chemical residues from ancient microbes in rocks 2.7 billion years old. These chemical remains from a primitive cell are nearly a billion years older than the oldest undisputed fossil remains.

—*Brain power*.—Scientists had thought that human brain cells, unlike other biological cells, do not renew themselves as they die off. But researchers have discovered that brain cells do regenerate—and do so continuously throughout a person's life. The finding opens the possibility of treating disorders such as Parkinson's or Alzheimer's with cells taken from a patient's own brain.

—*Stem cells*.—The late 1998 discovery that embryonic cells could be maintained as undifferentiated stem cells, with the potential to become virtually any type of cell in the body, was followed up this year by more than a dozen landmark papers describing their remarkable capabilities. This dramatic work has tremendous therapeutic potential for people suffering from Parkinson's, diabetes, and many other diseases. Stem cells could eventually be induced to grow everything from blood to organs. Doctors, for example, could grow tissue from stem cells and then transplant it into the same person to avoid rejection.

—*Tissue regeneration*.—Scientists discovered a new type of stem cell when they isolated the mesenchymal cell in bone marrow. What's more, they were able to induce these cells to grow into specific types of connective tissue, such as cartilage, bone, or fat cells. Other potential applications include new muscles and tendons for sports injuries, and fat tissue for implants.

PRESIDENT CLINTON'S FISCAL YEAR 2001 R&D BUDGET

The President and the Vice President remain unwavering in their support for science and technology as crucial investments in our future. They maintain that such investments enable our nation to compete aggressively in the global marketplace, protect our environment and manage our natural resources in a sustainable manner, safeguard our national security from emerging threats, and spur the technological innovation that has contributed so much to our economic prosperity and quality of life. They have brought the budget into balance. They have increased the investment in science and technology. We all, but especially our children and our grandchildren, will reap the rewards.

Fiscal year 2001 is the eighth year in a row that the President has proposed increased investments in civilian research and development. The civilian R&D request is $43.3 billion, an increase of 6 percent ($2.5 billion) over fiscal year 2000. The civilian R&D request now constitutes 51 percent of the overall R&D budget of $85.3 billion.

The request boosts funding for basic research to $20.3 billion, an increase of 7 percent ($1.3 billion) over fiscal year 2000. The budget also strengthens university-based research, which increases by 8 percent ($1.3 billion) over fiscal year 2000. Substantial increases for several agencies help to restore balance between biomedical research and other scientific disciplines. The budget provides increases for research in the core disciplines of science and technology across the board. As the President has said, "We have to have a balanced research portfolio, because the research enterprise is increasingly interdependent." He got it exactly right, and his deeds match his words.

SCIENCE & TECHNOLOGY INITIATIVE

The budget request includes a $2.9 billion Science and Technology Initiative directed towards national goals such as world leadership in science and technology and long-term economic growth and prosperity. This S&T Initiative is contained within the 21st Century Research Fund, which ensures effective integration of our science and technology investments. The Research Fund grows by 7 percent in fiscal year 2001, to a total of $42.9 billion.

These investments will ensure that science and technology will continue to fuel economic growth and allow Americans to lead longer, healthier lives. These investments also will enable America to continue to lead in the 21st century by increasing support in all scientific and engineering disciplines, including biomedical research, nanotechnology, information technology, clean energy, and university-based research. Specifically, this infusion of funds will enable researchers to tackle important scientific and technological challenges, and will lead to:

—*American prosperity in the 21st Century*.—With rapid growth, increased productivity and rising standards of living, the U.S. economy is thriving, in large part because of our technological leadership. Science and technology have become the engine of America's economic growth: information technology alone accounts for ⅓ of U.S. economic growth, and is creating jobs that pay almost 80 percent more than the average private-sector wage. Many of the technologies (such as the Internet) that are fueling today's economy are the result of government investments in the 1960's and 1970's.

—*Longer, healthier lives for all Americans*.—In the last 100 years, the life expectancy of the average American has increased by almost 30 years, as a result of breakthroughs such as antibiotics. Today, we are on the verge of even greater scientific advances, and continued investment in health-related research could lead to greater life expectancies and better quality of life.

—*Educating America's high-tech workforce*.—The President's investment in university-based research will help spur innovations in new technologies and treatment, while preparing the next generation of leaders in science, engineering and technology.

—*Cleaner energy for a cleaner environment*.— Research can help America create cleaner sources of energy and energy-efficient technologies, such as fuel cells that emit only water, cars that get 80 miles per gallon, and bioenergy derived from new cash crops.

—*New insights into the world around us*.—Increases in funding for science-based research can lead to amazing breakthroughs in our understanding of the world around us and beyond.

HIGHLIGHTS OF THE R&D BUDGET

The proposed R&D investments will enable the S&T agencies to achieve the President's goals for science and technology: promoting long-term economic growth that creates high-wage jobs; sustain a healthy, educated citizenry; harnessing information technology; improving environmental quality; enhancing national security and global stability; and maintaining world leadership in science, engineering, and mathematics. For example:

—*National Institutes of Health (NIH)*.—The budget provides a $1 billion increase (6 percent) in biomedical research at the NIH that will support research in areas such as diabetes, brain disorders, cancer, genetic medicine, disease prevention strategies, and development of an AIDS vaccine.

—*National Science Foundation (NSF)*.—The budget provides a $675 million increase (17 percent) in the National Science Foundation—double the largest dollar increase in NSF"s history. This increase will boost university-based research and ensure balanced support for all science and engineering disciplines. NSF funds half of all non-health related university-based research.

—*Department of Energy (DOE)*.—The budget provides $4.2 billion (a 15 percent increase) for DOE's programs in the 21st Century Research Fund. The budget includes a 13 percent increase for basic science programs as well as continued support for construction and operation of large scientific user facilities, including the Spallation Neutron Source.

—*Department of Defense (DOD)*.—The budget provides $1.2 billion in basic research (a 4.3 percent increase), and $3.1 billion in applied research. Research on counter-terrorism and on improvements in the safety and security of the Nation's physical infrastructure and information and communications systems receive targeted increases.

—*National Aeronautics and Space Administration (NASA)*.—The budget provides $5.2 billion (a 6 percent increase) for NASA's programs in the 21st Century Re-

search Fund, including $2.4 billion for Space Science (a 9.4 percent increase), and $290 million (a 48 percent increase) for a $4.5 billion five-year space launch initiative.

—*Department of Commerce (DOC)*.—The budget includes $862 million for DOC programs in the 21st Century Research Fund. It provides $176 million (a 23 percent increase) for NIST's Advanced Technology Program to promote competitive, cost-shared R&D partnerships, and $50 million to create an Institute for Information Infrastructure Protection.

—*Department of Agriculture (USDA)*.—The budget provides $894 million (an 8 percent increase) for the Agricultural Research Service. The budget also includes $469 million for research and education activities through the Cooperative State Research, Education and Extension Service, including $150 million (a 26 percent increase) for the National Research Initiative (NRI). The NRI provides competitive grants in areas of national concern such as food safety, the environment, plant and animal research, and human nutrition.

—*Department of Transportation (DOT)*.—The budget provides $899 million (a 39 percent increase) for DOT's programs in the 21st Century Research Fund. The budget includes $338 million for the Intelligent Transportation System initiative aimed at enhancing the safety and efficiency of the surface transportation infrastructure.

—*Department of the Interior (DOI)*.—The budget provides $895 million (a 10 percent increase) to USGS for science that supports natural resource and environmental decision-making. The budget also supports research and technical assistance on the scientific needs of land managers and local land use planners.

—*Environmental Protection Agency (EPA)*.—The budget provides $758 million (a 14 percent increase) for EPA's programs in the 21st Century Research Fund. The EPA budget funds research that provides a sound scientific and technical foundation for environmental policy and regulatory decision-making.

—*Department of Education (DOEd)*.—The budget provides $379 million (a 19 percent increase) for Ed's programs in the 21st Century Research Fund. The budget provides $20 million to support a collaborative research effort with NSF and NICHD on large-scale, interdisciplinary research focused on understanding how promising practices and research on how children learn can be scaled up and applied in complex and diverse classroom settings.

INTERAGENCY INITIATIVES

The budget increases funding for a number of priority research areas that require multi-agency efforts. High priority interagency programs identified by the National Science and Technology Council for special emphasis in fiscal year 2001 received the following increases:

—*National Nanotechnology Initiative*.—This new $495 million initiative in nanotechnology—the ability to selectively move individual atoms and molecules—could revolutionize the 21st century in the same way that the transistor and the Internet led to the Information Age. Increased investments in nanotechnology could lead to breakthroughs such as molecular computers that can store the contents of the Library of Congress in a device the size of a sugar cube, and new materials ten times as strong as steel at a fraction of the weight.

—*Information Technology Research*.—A nearly $600 million increase in information technology research (35 percent) could lead to advances such as high-speed wireless networks that can bring distance learning and telemedicine to isolated rural areas; and supercomputers that can more accurately predict tornadoes and hurricanes, and more rapidly develop life-saving drugs. This funding continues the funding for fundamental, long-term research, advanced applications, and research on the economic and social implications of information technology begun last year.

—*Climate Change Technology Initiative*.—The budget provides a 30 percent increase for this initiative, which includes $1.4 billion in R&D on energy efficiency, renewable energy, carbon sequestration, and improvements in nuclear and fossil technologies. The initiative also provides $400 million in tax credits to stimulate adoption of energy efficient technologies.

—*U.S. Global Change Research Program*.—The budget provides $1.74 billion to observe, understand, predict, and assess the state of the Earth and how it changes in response to natural and human-induced forces.

—*Partnership for a New Generation of Vehicles (PNGV)*.—The budget provides $255 million (a 13 percent increase) for this cost-shared, industry partnership. PNGV aims to develop affordable cars that achieve up to three times the fuel

economy of comparable vehicles and meet all applicable emission and safety standards.

—*Aviation Safety, Security, Efficiency, and Environmental Compatibility Initiative*.—The budget provides over $1.3 billion for FAA, NASA, and DOD to develop technology to help ensure that the nation's air transportation system will support the economic growth created by information technology and the E-commerce revolution and will

—*Countering 21st Century Threats*.—The President's budget provides $590 million, a $56 million (10 percent) increase, for Weapons of Mass Destruction R&D to enhance our research and development efforts in preventing, detecting, and responding to the release of weapons of mass destruction, and to more effectively manage the health, environmental, and law enforcement consequences of such an incident should one ever occur. Furthermore, the budget includes $606 million, a $145 million (31 percent) increase, for Critical Infrastructure Protection R&D to improve the safety and security of our nation's critical infrastructures—the power, communications, information, transportation, and other systems on which our economy, national security, and quality of life depend. achieve the President's goal of reducing the aviation accident rate by 80 percent within 10 years.

—*Interagency Education Research Initiative*.—The budget provides $50 million ($25 million at NSF, $20 million at ED, and $5 million at NICHD) to support large-scale, interdisciplinary research focused on understanding what educational strategies work and why in two key areas:early learning of foundational skills; and transitions to learning increasingly complex science and mathematics.

—*National Plant Genome Initiative*.—The budget provides $87 million for the National Plant Genome Initiative (NSF, USDA, DOE, and NIH) to unravel the complex genomes of economically important plants.

THE OSTP MISSION

In support of our Nation's science and technology priorities, OSTP has two primary responsibilities: advising the President on S&T; and providing leadership and coordination for our government's role in the national S&T enterprise.

In the 1950's, in response to Soviet advances, highlighted by the launch of Sputnik, President Eisenhower saw the need for expert S&T counsel, and he invited James Killian, then president of MIT, to Washington to serve as the head of the first President's Science Advisory Committee, an OSTP predecessor. Since then our Nation's Presidents have drawn on the expertise of our office for S&T policy advice, and I see this as a contribution that will continue to grow in value as the challenges we face become increasingly complex.

Within our agency, a small staff of professionals analyzes developments at the frontiers of scientific knowledge, and aids the President in shaping policy. OSTP also provides scientific and technical information and recommendations to the Vice President, the White House Offices, the Executive Branch Agencies, and to Congress.

A second responsibility of OSTP is to provide leadership and coordination across the Administration. OSTP plays this role for a range of Administration priorities, including national security and global stability, environment, science, and technology. The National Science and Technology Council (NSTC) has been an invaluable partner with OSTP in developing interagency evaluations and forging consensus on many crucial S&T issues.

OSTP BUDGET REQUEST

I ask today for your continued support of OSTP's role in coordinating S&T policy for the Executive Branch and for our Nation at large. OSTP's budget request of $5,201,000 for fiscal year 2001 represents an increase in budget authority of less than 2 percent and no increase in the FTE level. This request will allow OSTP to fulfill its coordination and advisory responsibilities.

The requested fiscal year 2001 budget will support the Director and up to four Associate Directors plus a staff of seasoned professionals with diverse training and experience. Our requested small increase is essential to continue to provide quality support to the President and information to the Congress. Since personnel costs constitute the largest portion of OSTP's budget, our fiscal year 2001 budget request reflects our commitment to operate more efficiently and cost-effectively without compromising the essential element of a top caliber science and technology agency—high quality personnel.

NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

To meet the Administration's priority S&T goals we must combine the efforts and the expertise of multiple agencies. OSTP personnel support the work of the NSTC, a Cabinet-level Council that sponsors interagency initiatives to advance key S&T objectives.

Our distributed system of research funding also places a premium on coordination among complementary agency programs. The NSTC, now in its fifth year, is improving such coordination.

NSTC membership includes Cabinet Secretaries, heads of science and technology agencies, and key White House officials with significant S&T responsibilities. In the process of generating specific budgetary and policy recommendations, NSTC routinely reaches beyond the federal government to seek input from a wide spectrum of stakeholders in the public and private sectors.

An important objective of the NSTC is to guide individual agency budget priorities for R&D and to orient the S&T spending of each Federal mission agency toward achieving national goals. To meet this objective, the NSTC has established five goal-oriented committees, each of which is chaired jointly by a senior agency official and an OSTP Associate Director. These standing committees, along with ad hoc working groups within the NSTC, provide an effective forum to resolve cross-cutting issues such as determining the future role of the U.S. national laboratories, or providing a program guide to federally funded environment and natural resources (see Appendix A for a full list of NSTC generated reports from 1999.)

THE PRESIDENT'S COMMITTEE OF ADVISORS ON SCIENCE AND TECHNOLOGY

As Assistant to the President for Science and Technology, I co-chair the President's Committee of Advisors on Science and Technology (PCAST) with John Young, former President and CEO of Hewlett-Packard Co. The PCAST, which consists of distinguished individuals from industry, education, research institutions, and other non-governmental organizations, serves as the highest level private sector advisory group for the President and the NSTC. (see Appendix B for a full list of PCAST generated reports from 1999). President Clinton established the President's Committee of Advisors on Science and Technology (PCAST) at the same time that he established the NSTC to advise the President on matters involving S&T and to assist the NSTC in securing private sector involvement in its activities.

Mr. Chairman and Members of the Committee, I hope that this brief overview has conveyed to you the extent of this Administration's commitment to advancing S&T in the national interest. We are delighted that the fiscal discipline exercised over the past seven years has put in reach the opportunity to place more emphasis on investments that can assure future economic progress, environmental protection, and other national priorities which depend so heavily on strong and sustained R&D.

Regardless of party affiliation, in the end we can all agree that investments in S&T are investments in our Nation's future. I look forward to achieving bipartisan support for a national S&T strategy that will combine the resources of industry, academia, non-profit organizations, and all levels of government to advance knowledge, promote education, strengthen institutions, and develop human potential.

I ask not only for your support for OSTP's fiscal year 2001 budget request, but also want you to know how much I appreciate the long-standing bipartisan support of the committee for OSTP and for the S&T research enterprise. I would be happy to answer any questions that you have.

APPENDIX A

REPORTS—NSTC REPORTS AND PUBLICATIONS

Bioinformatics in the 21st Century (January 1999)

Research Involving Persons with Mental Disorders That May Affect Decision-making Capacity (March 1999)

The Role of Monitoring Networks in the Management of the Nation's Air Quality (March 1999)

Renewing the Federal Government-University Research Partnership for the 21st Century (April 1999)

Transportation Strategic Research Plan (May 1999)

Transportation Science and Technology Strategy (May 1999)

National Transportation Science and Technology Strategy (May 1999)

Program Guide to Federally Funded Environment and Natural Resources R&D (May 1999)

Our Changing Planet (June 1999)

Improving Federal Laboratories to Meet the Challenges of the 21st Century (July 1999)

Federal Food Safety Research: Current Programs and Future Priorities (July 1999)

Nanostructure Science and Technology, A Worldwide Study (August 1999)

Comparison of International Transportation R&D Expenditures and Priorities (September 1999)

Accessibility for Aging and Transportation-Disadvantaged Populations (September 1999)

Nanotechnology Research Directions: IWGN Workshop Report (September 1999)

Nanotechnology: Shaping the World Atom by Atom (September 1999)

National R&D Plan for Aviation Safety, Security, Efficiency, and Environmental Compatibility (November 1999)

These documents can be viewed at the NSTC Publications and Testimony Web page: http://www.whitehouse.gov/WH/EOP/OSTP/NSTC/html/nst__pubs.html

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APPENDIX B

ACTIVITIES OF THE PRESIDENT'S COMMITTEE OF ADVISORS ON SCIENCE AND TECHNOLOGY (PCAST)

In 1999 PCAST provided the following report: *Powerful Partnerships: The Federal Role in International Cooperation on Energy Innovation* (June 1999). It is in our fundamental national interest to greatly strengthen international cooperation in energy innovation. The PCAST concluded that continuing our current energy trajectory would be "problem plagued and potentially disastrous." Unless innovation to increase energy end-use efficiency and to improve energy supply technologies is both rapid and global, world energy demand is likely to soar in the next century to four times today's level, entailing higher consumer costs for energy, greater oil import dependence, worse local and regional air pollution, more pronounced climate disruption from greenhouse gases, and bigger nuclear energy risks than today. And if the U.S. abdicates leadership in international cooperation on energy technology while others forge ahead, it will cost U.S. firms dearly in their share of the multi-hundred-billion-dollar per-year global market in energy-supply technologies, most of which is and will remain overseas. As the world heads into the next millennium, however, there is a window of opportunity—open now, but closing fast—to move the world off this troublesome path. The choices the U.S. makes today will influence the evolution of the global energy system for many decades to come. The United States has strong stakes in the future economic, national security, and environmental course of world energy development.

PCAST also advised the President on the following topics:

Establishment of a Laboratory for National Information Infrastructure Protection. (December 1998)

Review of Proposed National Nanotechnology Initiative (November 1999)

Review of the NSB Report on Environmental Science and Engineering for the 21st Century (December 1999)

Letter to the President regarding fiscal year 2001 Budget Priorities (December 1999)

Letter to the President to Endorse the Proposed National Nanotechnology Initiative (December 1999)

NEED FOR NSF VISION

Senator BOND. Thank you very much, Dr. Lane. Let us begin now with questions.

You state a broad proposition and ask for relatively brief responses, and this is something we want to work with you later.

Dr. Colwell, I've been surprised to find, as I've talked with leaders in the scientific community in Missouri, including medical doctors, who ask me with a puzzled look on their face, "Congress is committed to doubling the NIH budget, but NSF continues to fall farther and farther behind." And some, including Dr. Bill Danforth pointed out that so many of the medical advances, so many of the vitally important discoveries that have helped heal the many, many diseases come from work from the NSF. "Why aren't you put-

ting more into NSF, the kind of basic science research in physics and engineering and information that really support and enhance the work that is being done in the strictly medical field."

It's a good question, and I certainly have an enthusiasm for it, but my enthusiasm might get us two or three votes on the floor. That's not what we need. We need from you a vision. I'm enthusiastic about your publicly stated goal of doubling the budget in 5 years, but the rest of the Congress seems to be taking a "show-me" attitude. What are you going to get for it? What policy goals would the Foundation pursue? What specific areas of research and education?

You've got to give us something that we can take to our colleagues who may not be focused on—we're all ready to sell; there's nobody better than my colleague from Maryland to go out and sell it. But what are you selling?

Dr. COLWELL. First of all, I think there's a need for an understanding that you have to have a parallel movement followed with progress. That is, the investment in NIH is terrific, but basic research and physics, math, engineering and chemistry really are the underpinning for the NIH discoveries.

Let me just give you an example. Magnetic Resonance Imaging comes really from basic research in physics. Laser surgery for cataracts comes from discoveries made in physics and chemistry and computer science. That is not understood. So we really need to make it very clear that it's—I don't know how to put it, but maybe it's like parallel lines on a railroad track; you've got to move it along together because they are, in effect, both needed and necessary.

The future moves with advances made in the basic sciences, along with biomedical applications. Now what do you get for the money? You get enormous contributions to the economy, and also the investments that we're making for the future include a new way of looking at learning and teaching.

We're hoping to establish Centers for Learning and Teaching; in other words bring together the interdisciplinary knowledge from medical research with our understanding of how the brain functions and tying that to improve methods of teaching. And thereby bringing teachers together to be able to learn new ways of being more effective with their pupils, and linking this to the information technology revolution so that we can, in fact, tailor education to individual students.

We also must pursue nanotechnology. It's interdisciplinary. And the future truly is interdisciplinary. When I arrived at the National Science Foundation, I said my biggest challenge will be to keep the strengths of the disciplines but at the same time pursue the opportunities of interdisciplinary research. And nanotechnology is a perfect example, because it's the interface of engineering, mathematics, chemistry, physics, and biology.

It brings it together in a way that provides an entirely new, revolutionizing future in miniaturization. Coupling miniaturization to nanoscale, which is a billionth of a meter, sort of a magical scale, to tera-scale computing——

Senator BOND. Before the time expires, let me just ask Dr. Lane and Dr. Kelly if they want to add anything briefly on this.

We really would like to work with you to develop a plan, because I want to sell it. But I need to know what I'm selling; I need to be able to understand what I'm selling so I can I hope explain it to others. That's your toughest challenge.

NEED TO SUPPORT BASIC RESEARCH

Dr. LANE. Mr. Chairman, there's no way I could say it better than Dr. Colwell just said, so let me just add: The funding for NIH, which is the body that funds biomedical research in this country, I think that trajectory is about right. That trajectory of funding pretty well tracks the GDP for this country. If we're going to fall below the GDP in investments in science and technology when we know that the returns are so substantial for our public, then we really need to understand why.

Our problem is that all of the supporting sciences—physical sciences, engineering, that Dr. Colwell referred to, are being substantially underfunded, and Harold Varmus, former director of the National Institutes of Health said it many times; that unless you support the basic chemistry and physics, computer science, mathematics, various fields of engineering, then you're not going to have the tools necessary to do biomedical research or anything else, for that matter.

So half of our economic growth in the past half century has come from innovation through investments in science and technology, most of that from the Federal Government. They didn't all come from biomedical research; in fact, it didn't primarily come from biomedical research; it came from investment in these other fields of study.

So I agree with you, Mr. Chairman, we do need to do a better job to help you get the message across, and we'll work with you on that.

OUTCOMES OF BASIC RESEARCH

Senator BOND. Dr. Kelly.

Dr. KELLY. The message I would get across is on two levels; one, the economy, the other is the quality of life. Our entire economic growth during this decade has been based on information technology and other scientific developments that are founded in basic research.

In terms of the quality of life, the health quality of life, environmental quality of life, what improvements we've seen educationally—all of the impacts in terms of the quality of life have also been based on basic research.

In terms of the economic growth of this country and the derivative resources to improve the quality of life, as well as the scientific basis of it is all, every bit of it has been based in fundamental research.

Senator BOND. Thank you very much.

Senator Mikulski.

NSF'S ROLE IN EDUCATION

Senator MIKULSKI. Thank you, Senator Bond.

In the second phase of my questions I am going to come back to "the vision" thing. But you know, we can't do research unless we have the people who have been well educated; K through 12 and then throughout higher education programs.

My questions will go to the role of NSF; and Dr. Lane, Dr. Kelly and your value-added comments. Because so many of our students that are well-educated at the undergraduate level come from other kinds of schools. And I was recently at the dedication of the new science building in Baltimore, of Notre Dame of Maryland College. It is the oldest Catholic women's college in the United States of America.

I helped get them some money for the building, but they—I saw the equipment that NSF paid for in this new facility, of which two-thirds came from State and private sector funds. Actually, more than two-thirds.

But then I talked to the young women, premed, bioengineering and a relationship between Notre Dame where they needed to spend the first 2 or 3 years in an all-women's environment, and then over at Hopkins. Bioengineering, biotech. But they were all going to start at this small college, of which NSF bought the scientific equipment.

Here goes to my question. And also, everywhere I go, every college wants to be a university and every university tells me they want to be a Santa Maria and a flagship in research. But I worry about the Ninas and the Pintas. Or the Arks and the Dove, Dr. Colwell.

So here is my question. In this budget that we're talking about, what do you see are the resources that are contained in your budget, and where we need to focus on are really what you think about in terms of not only our great land grant schools like the University of Maryland and the University of Michigan and so on.

But in these other schools, they produce so many people that will either go on say premed or physics or other scientific careers; or be our science teachers. Some of the young women that I spoke to were going to go into the classroom.

GRADUATE FELLOWSHIPS IN K–12 EDUCATION

Dr. COLWELL. You touch on a very, very important point, because 40 percent, actually, of the undergraduates are enrolled in 2 year colleges. This is a major contribution to the work force.

One of the things we have done in this past year is initiate what we call our GK12 fellowships; and that is to link the school system with graduate students. The students—we've now expanded it to undergraduate students as well as graduate students—receive tuition and fees and a stipend; they spend 20 hours a week working with a teacher in an elementary, middle, or high school, working together, with the principal investigators being a basic scientist or engineer from the college or university and a teacher—not an administrator or principal, but a first class teacher.

And the two co-principal investigators—and the students provide the excitement and information about the science——

Senator MIKULSKI. Tell me the name of the program and how much—I think I understand the concept.

Dr. COLWELL. It's the GK12 program, and I believe it is about $28 million for——

Senator MIKULSKI. And about how many stipends and teachers is this?

Dr. COLWELL. We started about half that, and we had about 100 some graduate students who came to the NSF for a meeting of first year grantees and associated graduate students. They haven't quite completed their first year. I don't know the exact number, but it's several hundred, and I'll get that information to you.

[The information follows:]

GRADUATE TEACHING FELLOWS IN K–12 EDUCATION

The Graduate Teaching Fellows in K–12 Education (GK–12) program was initiated in fiscal year 1999. This program supports fellowships and associated training that will enable graduate students and advanced undergraduates in the sciences, mathematics, engineering, and technology to serve in K–12 schools as resources knowledgeable about both the content and applications of science, mathematics, engineering, and technology. Funding in fiscal year 1999 supported 31 projects, which collectively proposed to involve approximately 280 graduate students and approximately 120 undergraduates.

FACILITIES AND EQUIPMENT FOR SMALL SCHOOLS

Senator MIKULSKI. Now, let's then go to the need for both facilities and equipment at these smaller schools. Where do we stand on that?

Dr. COLWELL. We of course do not build buildings, but we do provide equipment, and that is very important. And we have programs for the 4 year colleges for equipment.

Senator MIKULSKI. And how much is that, and how much do you think you need related to the requests that you get?

Dr. COLWELL. Well, I'll give you the number, but I'll tell you we need twice as much.

Senator MIKULSKI. Let's hear it.

Dr. COLWELL. Well, I will give—where's the executive——

Senator MIKULSKI. You can turn to your very able staff; this is not a quiz, Dr. Colwell.

Dr. COLWELL. It's about $50 million for the facilities and equipment, and——

UNFUNDED PROPOSALS

Senator MIKULSKI. And about how many requests do you think you get at NSF that your team rate as a satisfactory. In other words, that they would be very capable of using the funds?

Dr. COLWELL. Actually, we've just done a study of the rankings and we can fund most of the excellent, and some of the very good, but not all; and there's—underfunding of outstanding research.

Dr. Pitts, would you like to comment on that?

Senator MIKULSKI. I know my time is up.

Could you come to the microphone so you could be part of the record as well?

Senator BOND. And can I have your name, please?

Dr. PITTS. Dr. Nathaniel Pitts. We have just finished our merit review report for 1999, and when we look at our data that talks about the rankings that peer reviewers give to proposals, and our ranking is a five scale ranking from poor to excellent, a very good

being the second rating down, that many of our—actually about 7,200 of our proposals are in the very good range and are not paid.

Senator MIKULSKI. But how many are they? In other words, are they ten or are they a hundred, or a thousand?

Dr. PITTS. Well, I'm now talking about reviewers rankings, but NSF as you know funds about 10,000 proposals a year, declines about 20,000 proposals a year, and you're talking about a substantial number in this range.

Senator MIKULSKI. And if the chairman would allow me for one question, the very goods and the excellents, are these big schools where the schools are what I call the Golden Rolodex meaning the prestigious schools? Hopkins would be cranky when I say that, but Hopkins really has a whole team to pursue grants and they win Nobel prizes. But again, I'm the St. Mary's College and the Notre Dames.

Dr. PITTS. The particular data I'm talking about is not disaggregated like that; but in this range, these will be all types of institutions.

Dr. COLWELL. Let me add, Senator, NSF limits proposals to three per school for Major Research Instrumentation Program for the reason that you've enunciated. And that is to give a level playing field for the smaller colleges. So the bigger institutions can't flood us with large number of proposals.

Senator MIKULSKI. As you know, I'm very interested in the smaller, liberal arts schools that produce people with basic science who either then go to science careers or into science education. And as we talk further, let's get a breakout of whether it's the big schools, or where we stand. And I'll come back to that.

Dr. COLWELL. Let me just add a point here; it has been shown that the 4 year liberal arts colleges produce more scientists and engineers, physicians and professionals than the other schools do.

Senator BOND. Senator Mikulski, I appreciate your bravery. I've got to go back to a reunion later this month at one of those schools that's one of the "haves"; so I hope there's nobody here——

Senator MIKULSKI. I went to a small Catholic womens college that merged with a Jesuit college, so it continues to be a Jesuit college.

But it is these small liberal arts schools. And Mr. Chairman, they've also been really an incubator for women, minorities—not that the big schools haven't; this isn't either/or, but it's to make sure one whole category is not left out.

You went to a big school, is that right?

Senator BOND. I think—I believe they probably do okay in the funding, but we won't mention that here.

Dr. COLWELL. I did teach at Georgetown University for 7 years before going to the University of Maryland. So I've had the flavor of both.

PUBLIC MISUNDERSTANDING OF BIOTECHNOLOGY

Senator BOND. All right, moving off of biographical sketches.

Dr. Lane, I'm very much concerned, as you and I discussed yesterday about the fear and hysteria surrounding biotechnology. And I've asked the administration to mobilize to combat these fears and inject reason and facts in the public debate.

Last year we directed OSTP to convene a working group of the agency, to come up with strategy and recommendations. The administration yesterday announced its plan; and in connection with the plan's release as I mentioned earlier, Dr. Henney of FDA stated that FDA's scientific review continues to show that all bioengineered food sold here in the United States today is as safe as the non-bioengineered counterparts.

I'd like you to comment on that, and also, could you describe the recommendations, very briefly, of the working group's plan and how will this plan address the misinformation on biotechnology that's being spread through the media?

Dr. LANE. Thank you, Mr. Chairman. This is a very serious matter which the administration is quite focused on and will comment on a plan that was rolled out very recently.

But let me say at the outset, I think we all need to keep in mind, and we need to make sure the public understands the enormous promise that these technologies hold for the future; the future of our own people, the future of people around the world.

And I know the National Science Foundation yesterday evening presented an award to Dr. Normal Borlog, who is a great champion and has done wonderful things in this area—and maybe Dr. Colwell could comment on that in a minute.

Even the first generation products like pest-resistant plants that have come out of these technologies and allow in many cases farmers to use much, much less pesticide material—which we know is damaging. I mean, talk about killing caterpillars and butterflies, you do in fact do a lot of harm to otherwise good insects inadvertently through the methods that we have been using so far.

We have an opportunity to get around that and to protect our environment at the same time, we deliver all the benefits of these technologies. Second generation products that will come out of biotechnology that provide enormous environmental benefits as well as direct benefits to consumers through improved nutrition. Foods that improve people's health generally. Foods that can be made allergy-free that prior to that so many people in our population couldn't touch at all. And in fact in some cases, endangered their lives. And many, many other examples.

The United States' system for regulatory oversight for products of agricultural biotechnology is based on science, not on politics, not on superstition, not on hysteria. Therefore as the science advances we need to make sure that our regulatory agencies are continuing to ask the right questions. These technologies change very fast, so it's important that the agencies look closely at what the implications are. But we have to remember, we have 10 years of experience or more, in science-based regulatory oversight of these biotechnology products. We have the safest system of food in the world.

Now we've seen in recent months the impacts of incomplete science on public opinion, and the Monarch butterfly research was a good example of that. The research that showed in a laboratory environment that the BT toxin that appeared on milkweed surrounding corn crops harms Monarch caterpillars. But if you feed a caterpillar a poison to the caterpillar, then the caterpillar at least gets sick, and dies.

But if you look at realistic, much more complex environments in the real world, and that research is going on, what we find is that the effect is much, much less than had been suggested; it's even negligible.

Could I quickly say what the parts of the President's announcement are?

AGRICULTURAL BIOTECHNOLOGY

Senator BOND. And I just want to ask you one other thing. We discussed yesterday the NAS–USDA field test of Bt corn showing that the much lower rate of cancer-causing mycotoxin. If you could explain that and very briefly in layman's terms, I think we talked about it yesterday.

Dr. LANE. Can I give that one to Dr. Colwell?

Dr. COLWELL. Two points. It's very important. One of the many reasons for the biocomplexity initiative is that we have over the last 30 years, 40 years invested heavily—as we should have done, as a nation, in molecular biology, biotechnology, genetic engineering. We now have these wonderful opportunities ahead of us.

We did not, concomitantly, invest in understanding the environment. And it's the scientific and engineering underpinning of how complex systems of the environment work, i.e., biocomplexity. If we did understand that, we would then be in a position to be able to make predictions and sound scientific judgments; so we need to gather information on biocomplexity; that will allow us to utilize these opportunities.

Let me also mention Dr. Borlog. An 83-year old gentleman who, by using classical techniques of plant selection and breeding, was able, single-handedly to save more lives, through good nutrition via the crops he produced, than any other living human being.

Last night he gave an impassioned plea, which was much in the vein of your introductory statement, Senator, for the value and importance of the new agricultural biotechnology for the benefit of the world populations to provide nutrition and food.

It was an extraordinary opportunity to hear this gentleman, a man who really knows what he's talking about.

Third point I'd like to make—I'm sorry about that.

Senator BOND. That's all right.

Entirely appropriate shodding, one I accept most generously. Thank you.

Dr. COLWELL. Well, the point was that a man who has won many, many prizes for his research——

Senator BOND. What you meant was, he knows what he's talking about. That's what you meant, you said it, and——.

Dr. COLWELL. The point that is really important here is that the classical techniques of breeding are imprecise. And what one does is actually move genes around with bits of extra DNA hanging on them. But with genetic engineering and "enzymatic scissors", very precisely we can make these kinds of transfers. So that we know what we're doing in a way that we've never been able to do before.

This allows us, with great precision, to provide the benefits of improved crops and the benefits of biotechnology.

With respect to comparison of the techniques of classical fertilized and chemically-treated crops, with the bioengineered crops

there is no question that you have much less need both for fertilizer and for chemical treatment to reduce pests and other infestations. And also you will remove those organisms which do produce toxins when crops are harvested, such as peanuts for example, and a fungus that will grow in association with the peanuts, produces aflatoxin, which is one of the most powerful toxins. In fact, fortunately the FDA does regulate and test, require testing for aflatoxin in peanut butter, since this is one of the most important foods for our children in the United States.

So if we are able to produce a crop that's aflatoxin-free, this then has an enormous advantage. And we can do this with biotechnology.

EXPLANATION OF GENETIC ENGINEERING

Senator BOND. With the indulgence of my ranking member, may I check the scientific authenticity of the statement I used to explain to people like me who are not very scientifically knowledgeable, that the old-fashioned methods of hybridization and crossbreeding can let you cross a pit bull and a greyhound and get a dog that can't run and won't fight. But with genetic engineering, you can do a much better job of selecting those. Is that a reasonable scientific approximation?

Dr. COLWELL. It is florid, but fundamentally accurate.

Senator BOND. Senator Mikulski.

Senator MIKULSKI. I'm mesmerized by you, Senator. You know, I remember when you took the committee over in 1994 and now they come to this best hearing of the fiscal 2001, and you're talking about crossbreeding and hybridization and—I think someone ought to give me an honorary doctorate.

Senator BOND. I've got a couple of those, and the only thing it does, they turn your name over to the development office and they ask you to contribute for alumni giving, so I've kind of turned them down after that.

COORDINATION OF THE NANOTECHNOLOGY INITIATIVE

Senator MIKULSKI. I'd like to come back to the nanotechnology issue for kind of our wrap-up question, because we're heading off to the allocation meeting where we're going to put our flag on the ground jointly. So if we're going to meet America's compelling human needs today and the science needs to lay the groundwork for the future, we really need a greater allocation.

So know that we would be working jointly to be able to do that.

But coming back to the nanotechnology initiative, I'm going to start with you, Dr. Lane, even though ostensibly NSF is to be in charge. I share a very keen interest in this new initiative because of a cornucopia of opportunity. I also share Senator Bond's concern about multi-agency initiatives, because I believe that a multi-agency initiative is what this is all about; but it usually means multiple meetings, and those that got power are going to keep it, and I just really wonder: What do you see as the organizational mechanism. This is not to say NSF shouldn't do it or whatever. But as you know that within the science budget there are whales, there are dolphins, and there are even minnows.

My question is, where would there be the kind of muscular way of coordinating this so everybody gets in in sync of really having those windows. Do you think it should be with NSF, do you think it should be with the President's science advisor with NSF playing the very key high profile role? You know what I'm saying. We have some excellent heads of our Federal agencies, but still, bureaucracy and turf often win out over science and advancement.

Dr. LANE. Thank you, Senator. We want to be sure we have a science-based coordination process as opposed to a bureaucracy-laden one.

I believe the National Science Technology Council is a very good mechanism, and I hope it will continue as a way to coordinate those activities involving the Federal agencies that need coordination; everything doesn't. But those that do, you need a mechanism to do that.

We've said before that the nanotechnology initiative was originally developed by an interagency working group. The people with the most knowledge at NSF and other agencies coming together, and yes they did have some meetings, but they were substantive meetings. They talked about what's underneath science and engineering at the nanoscale and what the opportunities are; and then I talked about the way in which we reviewed their ideas, and put it all together.

Right now we're working on an implementation plan for the coordination itself. We're talking about the possibility of a small coordination office, as we have in the case of global change research and as we have in the case of information technology——

Senator MIKULSKI. Would that be under you?

Dr. LANE. It would be an office funded through one or another of the agency's budgets, but it would be an office that essentially provides the staff support for coordinating this particular initiative.

Senator MIKULSKI. Where would it be located and who would it report to?

Dr. LANE. Physically it could be located in NSF, for example, as one of the coordination offices is now. It would report to whoever in government is chairing the committee of higher level government officials that oversee this activity. In the case of information technology, that's Dr. Ru——

Senator MIKULSKI. But I'm talking specifically about nano.

Dr. LANE. In the case of nanotechnology, we would expect a similar kind of an arrangement to be set up, and we're simply working with the agencies now to put together then the implementation strategy.

So the staff in this office would report to the interagency committee. We would be involved in that committee, but it would be chaired by a member of the staff of either NSF, likely as the lead agency, or one of the other agencies.

NEED TO PUBLICIZE NANOTECHNOLOGY INITIATIVE

Senator MIKULSKI. Well, I'd like to come back to something that Senator Bond said earlier about what we need to communicate to the Congress and to the American community.

First of all, I want to acknowledge the excellent work that the interagency task force has already done. I also would like to com-

pliment Dr. Roco at the NSF, because it is really those primary documents that I've read and pursued and took me on my own interest on this, in this field and in this topic.

But right now I feel it's like our little secret, about what this is. And it's well known in the scientific community and so on, but our colleagues don't know about it yet, and my concern is that if we follow this mechanism, and maybe it is the right mechanism, but we're going to hide out right under the bushel, and then the initiative is going to be buried under other bushels.

Also, even going to what Senator Bond is talking about with the plant genomes and also the whole biological revolution that has truly been part of, it's been a two-track revolution in our society, the biological and the infotec, that's moved everything forward, everything in our society and science.

So what I'm looking for is for perhaps on this and then who knows—that really have high visibility. And I don't want a Manhattan Project motto where we're throwing money at it and so on, because this isn't about throwing money about it, it is about spotlighting one that our agencies do in addition to NIH, not in new Roth. And in fact, NIH will be one of the crucial beneficiaries of the biological work, the nanowork, the infotec initiatives.

So would you please ponder that in talking with our colleagues, because I think we need visibility. Because I think from what I've read on the interagency, Dr. Kelly, is that the vision is there but it's not visible. And a vision that doesn't have visibility would be eclipsed by others who will meet to fund the crisis of the week or maybe a compelling disease that's emerged, et cetera. And yet you and I know that this is going to point to better diagnostics, better treatment. You talk about a spinal cord injury, just think about our little kids with cerebral palsy. We could go on and on.

Hopkins is working on an electronic eye. An electronic eye. Can you imagine? I can't even imagine it. But those are the kinds of things so that we need the right mechanism to be sure it's not bureaucracy, but we don't want the vision to be invisible. And I think we need to think about how we elevate it to make highest and best use of your ideas, and then we can get our colleagues to embrace the basic nature of science.

Senator BOND. Thank you very much, Senator Mikulski. If you want to start off and go plant the first flag, I want to ask just as couple of quick questions and then I will be over there as quickly as I can to join the battle.

Senator MIKULSKI. Well, we'll let those of you from the Santa Maria come, but we've got our Ninas and Pintas over there. And I believe we landed first anyway. So thank you, and I look forward to an ongoing relationship.

NSF'S RESPONSE TO THE PITAC REPORT

Senator BOND. Thank you, Senator.

Last year, Dr. Colwell, we directed the NSF to support research projects in information technology research, recommended by the PITAC report, such as software, scalable information infrastructure, privacy, the impact of information technology advances on areas of societal, economical and ethical importance, and encourage

the NSF to provide increased ratio of grants at higher funding levels for longer durations.

Could you comment on how the Foundation has responded to it? Could you give us a flavor of the type of proposals being submitted, and are you seeing risky, innovative proposals that we contemplated, or are they just more of the same? If you could answer that.

Dr. COLWELL. Yes; I'll try to be very brief.

With respect to the ITR program solicitation, we received something like 900 preproposals and about 130 were encouraged to write full proposals. And we got these proposals reviewed by making sure that we sent letters to every department in the relevant area. We received 290 very, very select, expert panelists from a database of 1,700 volunteers who were well-qualified.

So we have been able to select proposals, through this panel approach, and we've encouraged innovation and Dr. Bajcsy, who is here, went to every single panel meeting, and she has made a point of reading the preproposals as well. So we've been able to select—really, we'll be selecting very innovative proposals. And the numbers have been huge and the quality has been extraordinary.

So we feel very comfortable with the approach that we're taking.

NSF'S ABILITY TO FUND NUCLEAR-RELATED RESEARCH

Senator BOND. Thank you.

I call on Dr. Lane. It's my understanding that there's a statutory limitation or requirement on NSF's ability to fund nuclear-related research as it regards national security issues.

Number one, is the statutory restriction, which I understand dates from the 1950's, an impediment to what you would regard as necessary research at NSF? I know also work is done in collaboration with the Department of Energy and we are concerned that that research may focus too heavily just on power generators.

Are you able to and are we getting the kind of research in nuclear medicine and the many related fields of nuclear science that we should, or do you need to have that restriction lifted?

Dr. COLWELL. At the moment we're doing very well, because the NSF—one of the key roles is to support small groups of university researchers who use nuclear physics facilities in the United States and around the world. And also to educate the next generation of nuclear physicists.

So we do the basic physics research on structure, atomic studies, energetic beams of protons, light ions that are used by medical and nuclear scientists. We do that kind of research, so we don't really have an impediment, and we do collaborate extremely well with the Department of Energy. But I'll ask Neal to comment further on that.

Dr. LANE. I think it is true that a considerable amount of research in the area of nuclear energy goes on in the Department of Energy. And the Department of Energy supports activities all the way from the fundamental end where a good partnership with NSF assures that there's not an overlap of, not double funding of anything, to a much more applied activities in nuclear power. But also in issues of radiology and the impact of radiation exposure on humans.

In fact, that's what got the Department of Energy into the human genome project, which that department actually initiated, was their interest in genetic effects of radiation.

So it's a very broad program in the Department of Energy, and I think with the cooperation between the National Science Foundation and the Department of Energy, we can assure that there aren't any holes in the process.

Dr. COLWELL. Actually, CAT scans, NMR, PET scans, positron emission tomography; these are techniques that have come out of the basic NSF research. So the impediments are not there for basic research.

FUNDING FOR EPSCOR AND THE OFFICE OF INNOVATION PARTNERSHIPS

Senator BOND. Final quick question; the Office of Innovation Partnerships was created to build capacity at smaller research institutions, recognizing that the prestigious schools like Stanford, M.I.T., and Michigan are getting lots of dollars.

It's disappointing to me that the 2001 budget doesn't request any additional funds for the office; flat-funds EPSCoR and flat-funds a number of other programs designed to assist minority-serving institutions. I was kind of scratching my head, why we're going up in the budget and the point I raised earlier about the "haves" having more and the "nots" getting left out.

Dr. COLWELL. What we're doing is, the funding—co-funding, with the research directorates, in other words, we're leveraging money. So we will end up with total EPSCoR funding, including co-funding from the research accounts to be about $73 million.

We feel that we can help institutions by providing the EPSCoR funding, and then when projects come up that are fundable but the money isn't sufficient to fund in the research accounts, we can match them and, therefore, we can leverage the research accounts. This is also an important mechanism for bringing along those EPSCoR institutions that are beginning to do very, very well, even being competitive, because this is an experimental program. It's been running for a number of years, but it's a program to help leverage these institutions. This is one way to bring them up to their competition.

So we are working very hard to leverage the money in a way that we can actually increase the effectiveness of EPSCoR.

Senator BOND. Well, as I've said, I have many more questions; we'd like to continue this discussion; but if we're going to have any money at all to do these things we're talking about, I'd better go fight for the allocation.

So thank you very much. We'll leave the record open for questions from other members of the committee. I've asked that you give us further detail on several questions; we'll continue to work with you.

Dr. Lane.

Dr. LANE. Senator Bond, we didn't have time for me to lay out the approach to biotechnology the administration used. Could I submit something for the record?

Senator BOND. If you would, submit it. And I appreciated your briefing on it.

[The information follows:]

CLINTON ADMINISTRATION AGENCIES ANNOUNCE FOOD AND AGRICULTURAL BIOTECHNOLOGY INITIATIVES: STRENGTHENING SCIENCE-BASED REGULATION AND CONSUMER ACCESS TO INFORMATION

Agricultural biotechnology holds enormous promise for improving the productivity and environmental sustainability of food and fiber production. In order to secure that bright future, the Clinton Administration is taking steps today to further our long-standing goal of sound science regulation and improved access to information. These steps are intended to build consumer confidence, ensure that regulations keep pace with the latest scientific and market developments and ensure that voluntary product claims, such as labels, relating to biotechnology are truthful and not misleading.

The Federal Government Has a Strong Regulatory System for Agricultural Biotechnology, a Sector That Holds Enormous Economic and Environmental Promise. The U.S. regulatory approach to agricultural biotechnology applies principles of sound science to ensure that there are no unacceptable human health and environmental risks associated with the use of these crops and that they are safe to enter into commerce. This system, encompassing the food safety and environmental regulations of the Department of Agriculture, Food and Drug Administration, and Environmental Protection Agency, has resulted in rigorous scientific review of products, while providing a predictable regulatory environment that fosters scientific advancement and product innovation.

The Administration's Actions Today Will Strengthen our Science-Based Regulatory System and Facilitate Reliable, Voluntary Labeling Practices. The Administration's actions today will ensure that science remains the cornerstone of our nation's regulatory system—keeping up with recent advances in genetics, ecology, and health—and that Federal oversight of these products remains strong. In addition, they will facilitate voluntary efforts by producers to differentiate non-bioengineered commodities through the development of accurate and reliable testing and quality assurance procedures and through guidance for the content of product labels.

The Clinton Administration announces steps to:

Reinforce the Strength & Transparency of Science-Based Regulation

The Council on Environmental Quality (CEQ) and the Office of Science and Technology Policy (OSTP) will conduct a 6 month interagency assessment of Federal environmental regulations pertaining to agricultural biotechnology and, if appropriate, make recommendations to improve them.

The Food and Drug Administration (FDA) will take steps to ensure that it is informed at least 120 days before new agricultural biotechnology crops or products are introduced into the food supply and will propose that submitted information and the agency's conclusion be made available to the public.

The U.S. Dept. of Agriculture (USDA), FDA, and the Environmental Protection Agency (EPA) will support an expanded program of competitively awarded, peer-reviewed research focusing on current & future safety issues.

Enhance Information for Consumers and Farmers

FDA will develop guidelines for voluntary efforts to label food products under their authority as containing or not containing bioengineered ingredients in a truthful and not misleading manner, consistent with the requirements of the Federal Food, Drug, and Cosmetic Act.

USDA will work with farmers and industry to facilitate the creation of reliable testing procedures and quality assurance programs for differentiating non-bioengineered commodities to better meet the needs of the market.

USDA, FDA, EPA, and the State Department will enhance domestic and foreign public education and outreach activities to improve understanding of the nature and strength of our regulatory process.

USDA will provide farmers with reliable information on markets to inform their planting decisions and with best farming practices for new crop varieties.

These Initiatives Reaffirm our Science-Based Regulatory Approach and Improve Public Access to Information. These initiatives reaffirm the Federal government's confidence in its independent, science-based regulatory approach to agricultural biotechnology. They also reflect that, as science and industry advance and consumer interest grows, it is appropriate to maintain the strength of our regulatory framework and ensure that information available to the public about the technology and to consumers about food products is balanced and accurate. In so doing, Americans will be in a better position to realize fully the enormous promise of this technology.

DETAILS OF ADMINISTRATION INITIATIVES

Reinforcing the Strength of Science-Based Regulation

The Council on Environmental Quality (CEQ) and the Office of Science and Technology Policy (OSTP) will conduct a 6 month interagency assessment of Federal environmental regulations pertaining to agricultural biotechnology and, where appropriate, make recommendations to improve them.

—CEQ and OSTP will conduct an interagency assessment of environmental biotechnology regulations by preparing case studies to identify strengths and potential areas for improvement in the existing regulatory structure. The following agencies will participate in the assessment: Food and Drug Administration (FDA), Environmental Protection Agency (EPA), U.S. Department of Agriculture (USDA), and the Department of the Interior as well as other agencies as appropriate. The focus of this study will be in domestic environmental issues.

The FDA will take steps to ensure that it is informed at least 120 days before new agricultural biotechnology crops or products are introduced into the food supply.

—The FDA will develop a proposed rule to require companies to notify FDA of their intent to market a new food derived from biotechnology. This new rule would replace the current voluntary, but widely adhered to, practice of consultations with the agency. After reviewing the company's submission, FDA will issue a letter to the firm describing its conclusion about the safety and regulatory status of the food or animal feed.

The U.S. Department of Agriculture (USDA), FDA, and the Environmental Protection Agency (EPA) will support an expanded program of competitively awarded, peer-reviewed research focusing on current and future safety issues to expand the existing body of independent science on biotechnology derived foods.

—These three agencies will coordinate their research programs related to risk assessment of agricultural biotechnology and expand these programs, consistent with available resources, in a way that maintains a strong science-based regulatory program. In particular, USDA's research, funded under the Initiative for Future Agriculture and Food Systems, should provide a strong core of competitively funded risk assessment research.

Enhancing Information for Consumers and Farmers

FDA will engage in a process to develop guidelines for voluntary efforts to label food products under their authority as containing or not containing bioengineered ingredients in a truthful and not misleading manner, consistent with the requirements of the Federal Food, Drug, and Cosmetic Act.

—FDA will develop guidelines to help ensure product label claims concerning the biotechnology status of foods are truthful and not misleading. The guidelines will help manufacturers design labeling that is truthful and informative, rather than confusing. The agency will develop draft labeling guidelines with the use of focus groups, and will publish them for comment so as to receive maximum consumer input.

USDA will work with farmers and industry to facilitate the creation of reliable testing procedures and quality assurance programs for differentiating non-bioengineered commodities to better meet the needs of the market.

—USDA will develop an Advanced Notice of Proposed Rulemaking (ANPR) to seek input from consumers, industry, and scientists on how best to meet the needs of evolving markets. The ANPR will seek input on current market practice. In addition, it will seek input on the feasibility and desirability of quality assurance programs.

USDA, FDA, EPA, and the State Department will enhance domestic and foreign public education and outreach activities to improve understanding of the nature and strength of our regulatory process.

—Using a variety of outreach mechanisms at their disposal, agencies will proactively engage the public on how their foods are regulated and why these regulations protect the environment and human health. This is important both domestically and internationally where U.S. agricultural products are now facing increasing restrictions to some markets, in part due to the lack of shared understanding and information.

USDA will work closely with the State Department to ensure collection of timely information on overseas markets, and will provide farmers with reliable information on markets to inform their planting decisions and with best farming practices for new crop varieties.

—One of the most difficult choices a farmer faces each year is what to plant—what type of crops and what specific varieties. Farmers need better market data

to better inform their choices. In some cases the current uncertainty in overseas markets concerning biotech crops has made their selections even more difficult. USDA will provide' farmers with better information on changes in market access.

CONCLUSION OF HEARINGS

Senator BOND. Thank you very much, the hearing is recessed.

[Whereupon, at 11:04 a.m., Thursday, May 4, the hearings were concluded, and the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENTS OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT AND INDEPENDENT AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

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

MATERIAL SUBMITTED BY AGENCIES NOT APPEARING FOR FORMAL HEARINGS

[CLERK'S NOTE.—The following agencies of the Subcommittee on VA, HUD, and Independent Agencies did not appear before the subcommittee this year. Chairman Bond requested these agencies to submit testimony in support of their fiscal year 2001 budget request. Those statements submitted by the chairman follow:]

INDEPENDENT AGENCIES

DEPARTMENT OF HEALTH AND HUMAN SERVICES

AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

PREPARED STATEMENT OF DR. HENRY FALK, ASSISTANT ADMINISTRATOR

Mr. Chairman and Committee Members, thank you for the opportunity to provide you with written testimony on the Agency for Toxic Substances and Disease Registry's (ATSDR) budget for fiscal year 2001.

As you know, under the Superfund legislation, ATSDR was given the important mission of protecting the public's health related to exposure to toxic substances. Our mandate includes determining the nature and extent of health problems at Superfund sites, and advising the U.S. Environmental Protection Agency (EPA) and State environmental agencies on needed clean-up and other actions to protect the public's health. We are also charged with the critical task of determining the relationship between exposure to toxic substances and adverse health effects.

To fulfill our mission, Congress appropriated $76 million to ATSDR in fiscal year 1999, and $70 million in fiscal year 2000. The President's budget for fiscal year 2001 calls for an appropriation of $64 million to fund ATSDR's activities.

In this testimony we would like to focus on three areas which have major budgetary implications—for both current and future program activities.

—We have a substantial and continuing Superfund workload of increasing complexity. ATSDR provides critical health information and services at these sites to community members, EPA and state decision-makers, and health care providers.

—Health concerns continue long after clean up because health conditions often manifest only long after exposure.

—New, significant health problems continue to emerge that need to be addressed. Current cases of lung cancer and other lung impairments at Libby, MT, are a striking example of this.

Providing critical health information and services: Site Evaluations

The volume of ATSDR's workload at sites continues to be substantial. In the last fiscal year alone, ATSDR and our partners produced 1,569 health consultations, 108

public health assessments, and 32 exposure investigations. ATSDR has a staff of a little more than 400. To meet the workload demands, we supplement our own staff by funding 28 state health departments to work with us.

ATSDR's site health evaluation and consultation efforts are the starting point for all of the agency's site-specific health activities. Further site activities include epidemiologic health studies, health education and health promotion.

The breadth of ATSDR's activities at sites is matched by the breadth of the kinds of sites we routinely work on. Early in our program the focus was primarily on EPA's National Priorities List (NPL) sites. With time, however, our workload has shifted to a wider array of Superfund-covered sites including emergency removals, petitioned sites, and federal facilities. Examples of the kinds of sites we have worked on recently include:

—*NPL Sites*.—As mentioned, ATSDR is heavily involved at NPL sites. Among recent examples are Bunker Hill, Idaho; Keil Chemical Manufacturing, Indiana; Brick Township and Toms River, New Jersey; AMOCO Sugar Creek in Kansas City, Missouri; and the Monsanto/Solutia site in Anniston, Alabama.

—*Federal Facilities*.—Current examples of ATSDR involvement at federal sites are the Hanford Nuclear Facility in Washington; the Kelly U.S. Air Force Base in Texas; Camp LeJeune military base in North Carolina; the Otis Air Force Base in Massachusetts; and the Valley Forge National Historic Park near Philadelphia, Pennsylvania. Our work at federal facilities is funded by the affected federal agencies.

—*Emergency Response/Immediate Removal Sites*.—Examples of ATSDR emergency assistance is our responses to the Texarkana, Arkansas extensive mercury exposures; the Rhode Island concerns of PCB contamination in the Woonasquatucket River; and the Mississippi, Alabama, Louisiana, Tennessee, Arkansas, Texas, and Illinois methyl parathion exposures.

—*Petitioned Sites*.—Environmental public health expertise also is frequently requested or "petitioned" by concerned citizens. Among the areas where ATSDR has responded to petitions are the U.S. Navy bombing range on Vieques Island, Puerto Rico; the Santa Susana Field Laboratory in Ventura County, California; and the Fresh Kills Landfill in New York.

—*Resource Conservation and Recovery Act (RCRA) regulated sites*.—ATSDR is currently working with EPA to strengthen our support of their RCRA program. Some examples of RCRA sites at which ATSDR has been active include General Electric in Pittsfield, Massachusetts; Bovoni Landfill in St. Thomas, Virgin Islands; Iowa Beef Processing in South Dakota and Nebraska; Pacific Gas and Electric Company in Hinkley, California; and Trinity Foam Processing plant in Archdale, North Carolina.

—*Brownfields Re-development Sites*.—ATSDR has funded public health activities at Brownfields sites in Baltimore, Maryland; Lowell, Massachusetts; Portland, Oregon; Chicago, Illinois; Rhode Island; and Seattle-King County, Washington.

ATSDR's health consultations, public health assessments and exposure investigations at sites are critical in assisting EPA and state officials on clean-up decisions, addressing community health concerns, and in investigating possible increases in disease rates. The following are a few examples of ATSDR's public health activities around the country where our work has clearly made a difference:

—Concerned about possible exposures, this past year EPA asked ATSDR to review data on the Hudson Oil Refinery site in Cushing, Oklahoma for its public health implications. Based on a site visit and review of the data, ATSDR determined that the site posed an urgent public health hazard and released a public health advisory to that effect on March 4, 1999. In April, EPA successfully used that public health advisory to help them list the site on the National Priorities List which gave them access to necessary funds to continue their removal actions without interruption.

—In conjunction with our state cooperative agreement partner, ATSDR assessed the health concerns of the community living around an inactive metal-plating facility in Vincent, Alabama this past year. The health consultation indicated that there was an urgent health threat posed by deteriorating vats and buildings and chemical hazards on site; and a possible health threat from nearby potentially contaminated water. After Alabama and ATSDR advised the public and EPA of the hazards, EPA took immediate action to fence the site, post warning signs around the perimeter of the site, and sample on-site and off-site areas to better determine the extent of contamination.

The public was extremely responsive as well. The community worked with Alabama's health department and ATSDR to educate residents about the hazards posed by the site through community meetings, a newsletter, and a door-to-door campaign to stop children from playing on or near the site. Preliminary

evaluation of these efforts show that 90 percent of the residents correctly understood the hazards and risks associated with the site.

—Planned incineration of dioxin and other hazardous wastes from Times Beach and other Eastern Missouri contaminated sites created community concerns about potential exposures to these substances. To address these concerns, ATSDR, working with the affected communities and EPA, designed a study to measure blood levels of dioxin and related compounds before, during and after incineration to test the effects of incineration. Results of the ATSDR investigation utilizing blood samples analyzed by the CDC's environmental health lab showed that levels of dioxin and other contaminants in study participants decreased significantly from pre-incineration to mid- and through post-incineration. Because of extensive citizen input and involvement throughout the study, there was wide acceptance of these findings and a very successful test of the efficacy of incineration as a clean-up methodology.

Providing critical health information and services: Health Education

ATSDR's health education and promotion programs focus on educating individuals, communities, and health-care providers about the health effects of hazardous substances in the environment. ATSDR works with affected communities to develop and promote public health strategies to mitigate the health impact of hazardous substances. To ensure effective health care services, our targeted continuing education programs and physician-related partnerships have enabled local physicians, nurses, and other health care providers to better diagnose and treat their patients exposed to toxic substances.

As a result of site-specific lessons, ATSDR has become the leading resource within HHS for educating communities, the general public, and environmental health professionals about the medical and public health impact of toxic chemicals. ATSDR's toxicological profiles, case studies in environmental medicine, and medical management guidelines have become information source of choice for a wide range of audiences—from the lay public to the academician. Our website and toll-free information number provide user friendly access to this information literally hundreds of times per day.

To expand the reach and application of health education and promotion activities, ATSDR has established many partnerships with national organizations of health professionals. ATSDR's partners include the American Academy of Pediatrics, American College of Medical Toxicologists, Association of State and Territorial Health Officials, National Alliance of Hispanic Health, the Migrant Clinicians Network, and the National Environmental Health Association. Partnerships with state and local health departments are particularly critical to accomplishing public health activities at the most local levels.

Following are a few examples of health education and promotion activities that ATSDR has conducted directly and with partner organizations.

—A significant effort to educate health care providers was initiated in the Agricultural Street Landfill (ASL) community in Louisiana. ASL is a 95 acre former municipal landfill that was developed, in part, for residential use. In order to address the residents health and wellness concerns, ATSDR distributed environmental health information to all 462 health care providers who serve that community. In addition, we provided a training seminar that 165 of these health care providers attended—a group who collectively serves more that 90 percent of the community.

—The agency is working with the Association of Occupational and Environmental Clinics (AOEC). The AOEC 65-clinic network and 300 individual members work with ATSDR to provide responses to health concerns associated with exposure to hazardous substances for local health care providers and community members. This relationship enabled ATSDR to better respond to the community in and around Alberton, Montana, the site of a railroad derailment-caused chlorine spill. ATSDR and an AOEC physician worked with community members to develop criteria for evaluation of a range of health concerns. Thirty-eight residents received health evaluations and several were further referred for pulmonary and neuropsychiatric testing as a result of their exposure.

—The Tar Creek Superfund site is located in the northeastern corner of Oklahoma. Years of mining in the Tri-State Mining District (located at the juncture of Oklahoma, Kansas, and Missouri) has resulted in the accumulation of a large volume of tailings and other mine wastes. Children who live or play near mine tailing piles may ingest or inhale lead-contaminated dust. These piles have also been used by riders of off-road vehicles, and houses have been built on these tailings.

ATSDR, along with the Ottawa County Health Department, has put together a health promotion campaign which includes health care provider and community education, as well as outreach and blood lead testing in nearby communities. Intervention through a mobile blood-testing unit has resulted in seven educational sessions reaching about 400 preschool/kindergarten children. In coordination with Women, Infant and Children's (WIC) services, the county health department has checked for childhood anemia in over 100 blood lead level tests and offered blood lead screening to all pregnant women. A database was created to track blood lead levels and interventions and to provide information to EPA for pathway analysis and cleanup, when necessary. Additionally, parents of children identified with elevated blood lead levels receive proper referrals, education and are entered in the database for follow-up. Plans are to expand the blood-lead screening to each Head Start and kindergarten throughout the county's seven school districts in the 2000 school year.

The fiscal year 2001 budget, which is $6 million below the fiscal year 2000 budget, will support such efforts at selected sites, but some reductions will have to be made. (See Program Output Table for more detail.)

ATSDR PROGRAM OUTPUT TABLE

Program	$76 million fiscal year 1999 actual	$70 million fiscal year 2000 estimated	$64 million fiscal year 2001 projected
Cooperative Agreement States	28	28	21
Sites Addressed	500	500	400
Public Health Assessment Documents	108	78	60
Health Consultations	1,569	1,900	1,400
Exposure Investigations	32	45	30
Site-Specific Environmental Health Intervention	8	10	7
Priority Health Conditions, Epidemiologic, and Health Studies	35	30	25
Site-Specific Surveillance	3	3	.....
State-Based Surveillance	6	6	6
Hazardous Substances Emergency Event Surveillance (participating states)	15	14	12
Toxicological Profiles	20	14	10
Pediatric Environmental Health Specialty Units	6	10	5

Public health problems persist even after clean-up

There is an almost universally held perception that once a site is cleaned up no health problem exists. Unfortunately that is not the case. For many of the toxic substances found at Superfund sites, there is a long latency period before health conditions manifest themselves. For example, many cancers can take 20 or 30 years after exposure before diagnosis.

This issue has recently been a point of discussion in consideration of the reauthorization of Superfund. In June 1999, Congressman John Dingell's office contacted ATSDR to request that the agency provide information on adverse health effects associated with the top 50 substances on the Priority List with latency periods of six years or greater. In response, ATSDR reviewed and compiled the information available in our existing toxicological profiles. Our report noted that vinyl chloride, benzene, PCBs, trichloroethylene, hexavalent chromium, lead, arsenic, creosote, and benzidine are classified as "known to cause cancer in humans" or "probable human carcinogens," and have a latency period of at least six years, usually 10 to 20 years or more. In addition, a number of other substances on the list are classified as "reasonably anticipated to cause cancer in humans," based on limited evidence in humans, but sufficient evidence in animals. These substances include cadmium, chlordane, beryllium, carbon tetrachloride, and cobalt.

The consultation also summarized the potential for developmental or neurologic effects with a latency of at least six years. Substances associated with these adverse health effects include organochlorine pesticides (e.g., DDT, aldrin, chlordane), some metals (mercury, lead, cadmium), arsenic, and trichloroethylene (TCE).

ATSDR health studies and registry findings lend further evidence of the often lengthy time it takes before health effects are apparent in people exposed to toxic substances at Superfund sites. For example:

—Two ATSDR studies found that people exposed to lead (a common contaminant found at one-third of sites) during the 1970s at the Bunker Hill NPL site in Idaho, continue to have long-term health effects. As a result of exposures as children and young adults more than 25 years ago, this population is at risk for manifesting health problems such as neurologic disease, infertility, high blood pressure, and early onset of menopause.

—Analyses of self-reported data from the ATSDR Exposure Registry has indicated excesses of a number of health effects. Data from the registrants on the Dioxin Subregistry (which includes registrants from four Missouri NPL sites) and information from the nearly 10,000 people on ATSDR's subregistries on volatile organic compounds of TCE, TCA and benzene show an excess in reports of a variety of illnesses including anemia and respiratory problems.. Further studies are underway to validate these reported health effects.

—A follow-up study of people living near the Caldwell Systems, Inc., a former hazardous waste incinerator in North Carolina, found that residents initially found to have respiratory symptoms in an earlier study, continued to have a higher prevalence of respiratory symptoms two years later.

In addition, all of the following specific health conditions have been associated with exposures to hazardous substances—defective reproductive outcomes, cancer, immune abnormalities, and neurobehavioral effects. Several ATSDR studies have found associations between living near hazardous waste sites or drinking contaminated drinking water and low birth weight in infants. Associations have also been found between exposures and various birth defects, including cardiac, neural tube and oral cleft defects.

It is critical that ATSDR not only continue its study of the relationship between exposure to toxic substances and resulting disease—but also that we have funding to intervene with early diagnosis and referral wherever possible. Such interventions can and do save lives. A good example of this is the Drake Chemical Site in Pennsylvania:

—In 1986, ATSDR successfully implemented a screening program for former workers exposed to a human bladder carcinogen at the Drake Chemical site in Pennsylvania. These former workers had been exposed to betanaphthylamine a known human carcinogen, specifically linked to bladder cancer. A total of 364 workers were initially eligible for screening; 82 percent of whom chose to participate. Compliance was high; participation rates ranged between 82 percent to 92 percent. Of the workers screened in the first phase, 50 were referred for the second phase which included a laboratory diagnostic work-up (a cystoscopy). As of 1997, two workers have been diagnosed as having early stage cancer, another 13 were diagnosed with varying degrees of dysplasia, and 25 had some type of bladder abnormality diagnosed. This program has clearly been of benefit for detection and treatment of disease for these workers, and has been so successful that it now is continued by the State of Pennsylvania.

Continually emerging health problems at Superfund sites

The health screening activities begun at the Drake Chemical site more than a decade ago and continuing even today, underscore the need for long-term public health attention and intervention. Currently, ATSDR is involved in a number of sites where the long latency of diseases potentially associated with exposure to toxic substances have appeared. The situation in Libby, Montana, offers a dramatic example of past exposure resulting in serious disease.

Commercial vermiculite mining and processing facilities operated for more than 60 years (until 1990) in and near the city of Libby, Montana. Recent reports have documented cases of non-occupational asbestosis-related pulmonary impairment among family members of former mine employees and others in the community with no connection to the mining operations. They are suffering (or dying) from asbestosis, mesothelioma, and lung cancers related to their asbestos exposure. Finding non-occupational asbestos-related pulmonary disease is extremely unusual and suggests that dangerous levels of asbestos exposure have occurred within the Libby community. Once these reports became known to EPA at the end of last year, they requested ATSDR's assistance in responding to the very real concerns of the community. In the course of the last couple of months ATSDR has designed a medical testing program to address the public health implications of past human exposure to tremolite asbestos in Libby.

—The principal goal of the medical testing program is to identify asbestos-related health effects among people exposed to asbestos from the Libby vermiculite mine and refer them for additional evaluation and treatment.

—Another important goal of the testing program is to assess the prevalence of asbestos-related conditions in the study area as a whole. This will be performed

in order to: (a) identify the types of illnesses experienced by these exposed people and better educate local physicians; (b) provide the local medical community with an estimate of the additional medical care the community will need over the next 10–20 years, and; (c) provide the EPA with information needed to identify and eliminate current exposures to asbestos in the community.

The first phase of the medical testing program involving both chest x-rays and pulmonary function tests will be directed at the 3,000–5,000 people currently living in Libby who were potentially exposed. The cost of this first phase is approximately $4.5 million—an amount that could not be funded within ATSDR's fiscal year 2000 budget. Because EPA recognized the extreme importance of this medical testing program, they have allocated the $4.5 million to reimburse ATSDR to carry out this work.

As this medical testing program progresses, it may well need to be expanded to former residents of Libby who now reside in other parts of the country. EPA also is investigating scores of other sites throughout the United States that have utilized vermiculite from Libby. As EPA investigates these sites, public health actions at other sites with significant exposure patterns—including replicating the medical testing program—may be necessary. Epidemiologic studies to investigate the linkage of different exposure patterns to the development of disease may also be needed.

Another emerging health problem is the increase in brain cancer in children nationwide. In 1997, ATSDR initiated activities to investigate possible links between elevated rates of children's cancers in Toms River and exposures to hazardous substances. These actions include: a multi-site study examining the rates of brain cancer among residents, a multi-state case control study of childhood brain cancers, a review of available chemical data for the Dover Township area, and public health intervention activities including health care provider updates. Elevations in overall cancer incidence were confirmed for Dover Township and the Toms River section, particularly among female children under 5 years of age. Funding for this effort, and similar investigations at other sites, will be curtailed in fiscal year 2001.

Finally, there is some suspicion that increased liver cancers in the Southwest and increased cases of multiple sclerosis may be linked to exposures to toxic chemicals. The cost of investigating these illnesses is not included in our budget.

ATSDR has for more than 15 years applied the disciplines of environmental health science, epidemiology, toxicology, and health education to assess real and potential human health effects as related to hazardous substances. The agency has learned valuable information about the association of certain diseases and exposure to toxic substances and has used this information to help communities and environmental and health organizations to prevent and reduce potentially hazardous exposures. The agency has made a difference in the daily lives of many communities and in the body of knowledge in environmental health science. As the principal public health agency charged with determining the nature and extent of health problems at Superfund sites we will continue to strive to prevent exposures to hazardous substances and adverse human health effects.

Mr. Chairman and Committee members we would be happy to respond to any questions you might have about our testimony or any of our program activities. Please direct your questions to ATSDR's Assistant Administrator, Dr. Henry Falk, by writing him at MS E–28, 1600 Clifton Road, Atlanta, GA 30333, or phoning (404) 639–0700.

DEPARTMENT OF DEFENSE—CIVIL

DEPARTMENT OF THE ARMY

CEMETERIAL EXPENSES

PREPARED STATEMENT OF DR. JOSEPH W. WESTPHAL, ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS

INTRODUCTION

I appreciate the opportunity to provide written testimony to the subcommittee in support of the fiscal year 2001 appropriation request for Cemeterial Expenses, Department of the Army. The Secretary of the Army, is responsible for the operation and maintenance of Arlington and Soldiers' and Airmen's Home National Cemeteries.

Arlington National Cemetery is the Nation's premier military cemetery. It is an honor to represent the cemetery. This committee has historically been very supportive of the cemetery, and we appreciate your support.

FISCAL YEAR 2001 BUDGET OVERVIEW

The request for fiscal year 2001 is $15,949,000, an increase of $3,476,000 over the fiscal year 2000 appropriation. This increase will permit Arlington National Cemetery to improve its infrastructure and work toward implementation of the cemetery's Master Plan. The funds requested are sufficient to support the work force, to assure adequate maintenance of the buildings, to acquire necessary supplies and equipment, and to provide maintenance standards expected at Arlington and Soldiers' and Airmen's Home National Cemeteries.

Priority Investments

I would like to summarize some of the Administration's priority investments we are proposing this year.

First, the budget includes $717,000 to design the next increment of the Columbarium Complex.

Second, $500,000 is included to design relocation of existing utilities along one of the major thoroughfare's traversing the cemetery, taking advantage of economies of scale and providing additional burial capacity.

Third, $400,000 to continue preparation of a concept land utilization plan for lands contiguous to Arlington National Cemetery under the jurisdiction of the Department of Defense. This continues with the President's goal of ensuring that the cemetery remains open to initial burials through the end of the 21st century.

Fourth, $800,000 is included to study the repairs required at the Kennedy gravesites and the reception building at the Memorial Amphitheater.

Fifth, $100,000 is budgeted to continue developing a ten-year capital investment plan. We initiated this effort in accordance with guidance from the Office of Management and Budget (OMB) requiring a multi-year plan for financing construction projects.

Sixth, $900,000 continues an initiative started in fiscal year 1996 to expand contracts for enhancing the appearance of the cemetery, while reducing the overall number of government employees as part of government-wide streamlining.

BUDGET DETAILS

The funds requested are divided into three programs, Operation and Maintenance, Administration, and Construction. The principal items in each program are as follows:

Operation and Maintenance

The Operation and Maintenance Program, $11,535,000, will provide for the cost of daily operations necessary to support an average of 20 interments and inurnments daily and for maintenance of approximately 630 acres. This program supports 95 of the cemeteries' total 101 Full Time Equivalent Work-years (FTEW's).

Contractual services as part of Operation and Maintenance total $5,389,000, including: $1.7 million for grounds maintenance; $900,000 for information guide services; $1,590,000 for tree and shrub maintenance; and $130,000 custodial services. Custodial services previously cost about $210,000. However, competition resulted in a much lower bidder receiving this contract, leading to significant savings since fiscal year 1998. This contractor has now worked during the busiest season at Arlington, and performed adequately.

Administrative Program

The Administration Program, $967,000, provides for essential management and administrative functions, including staff supervision of Arlington and Soldiers' and Airmen's Home National Cemeteries. Budgeted funds will provide for personnel compensation, benefits, and the reimbursable administrative support costs of the cemeteries.

Construction Program

The Construction Program, $3,447,000, is for ongoing construction projects.

Capital investment plan.—The 1997 proposed Master Plan for Arlington National Cemetery has identified projects to repair and replace aging facilities and utilities, preserve and protect historic resources, enhance visitor access and circulation, and provide sufficient capacity to ensure interment and inurnment of eligible veterans to the extent possible within the cemetery's boundaries. There is $100,000 included in the fiscal year 2001 budget to continue developing a multi-year plan for financing

projects, consistent with the OMB guidance requiring full funding of capital investments in the most technically and financially efficient manner.

Other construction projects include: $400,000 to continue preparation of concept utilization plans for developing contiguous lands; $717,000 to design the next increment of the Columbarium Complex; $500,000 to design the relocation of existing utilities; $500,000 to study the repairs required at the Kennedy gravesites; $300,000 to study the repairs required at the Memorial Amphitheater reception building; $200,000 to repair the roof at the visitors center; $200,000 to perform road repairs throughout the cemetery; $100,000 to inspect the existing sewer lines for needed repairs; $50,000 to remove an underground storage tank; $30,000 to study repairs required at the paid parking facility; and $350,000 to continue the graveliner program.

FUNERALS

In fiscal year 1999, there were 3,586 interments and 2,152 inurnments. In fiscal year 2000, we estimate there will be 3,700 interments and 2,200 inurnments, and in fiscal year 2001, we estimate there will be 3,700 interments and 2,300 inurnments.

CEREMONIES

Thousands of visitors, both foreign and American, visit Arlington to participate in events. During fiscal year 1999, about 2,700 ceremonies were conducted and the President of the United States attended the ceremonies on Veterans Day and Memorial Day.

During fiscal year 1999, Arlington National Cemetery accommodated approximately 4 million visitors, making Arlington one of the most visited historic sites in the National Capital Region. This budget includes $100,000 to continue a study, begun in fiscal year 1998, to develop an estimating procedure and reliable estimates providing more information on the demographics of visitors that Arlington National Cemetery serves. This increased orientation to our "customers" is consistent with the Government Performance and Results Act and the National Partnership for Reinventing Government.

CONCLUSION

The funds included in the fiscal year 2001 budget are necessary to permit the Department of the Army to continue the high standards of maintenance Arlington National Cemetery deserves. I urge the Subcommittee to accept this request.

GENERAL SERVICES ADMINISTRATION

FEDERAL CONSUMER INFORMATION CENTER

PREPARED STATEMENT OF TERESA NASIF, DIRECTOR

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to be here today to present the fiscal year 2001 budget request of the Federal Consumer Information Center (FCIC). With me today is Beth Newburger, Associate Administrator of Communications for the U.S. General Services Administration and Debi Schilling, Director of Budget for the U.S. General Services Administration.

Today, I appear before you for the first time as the Director of the newly formed Federal Consumer Information Center. In keeping with GSA's strategic goal to excel at customer service, GSA Administrator Dave Barram signed an order on January 28, 2000 transferring the Federal Information Center (FIC) to the Consumer Information Center (CIC).

The merger brings together two very popular, highly visible consumer organizations. The CIC was established by Executive Order in 1970 to work in partnership with Federal departments and agencies to inform the public about health and safety issues, developments in federal programs, and the impact and effects of federal research and regulatory actions. The FIC was established in 1966 and formalized by Public Law 95–491 in 1978 to provide the public with direct information about all aspects of Federal programs, regulations, and services. The FIC simplifies access to the Federal Government by serving as a single, initial point of contact. To accomplish this mission, FIC uses contractual services to respond to public inquiries via a nationwide toll-free telephone call center. The calls cover a myriad of topics such as Federal benefits, passports, Federal taxes, housing, and consumer issues.

The merger will facilitate public use of Federal information by broadening both the variety of information available and the ways consumers can obtain it. The new Federal Consumer Information Center combines the nationwide toll-free telephone assistance program and databases of the FIC with the CIC web site and publication distribution programs. Bringing together these two organizations will streamline and enhance the delivery of information services to the American public. The FCIC will become a one-stop source for citizens to get answers to questions about government and consumer issues—the consumer's help desk for everyday life. FCIC will give the answer they can trust and in the way they want it: in print, on the web, or from a friendly voice on the phone.

A cornerstone of the FCIC reference library, used by consumers and information professionals alike, is the Consumer's Resource Handbook. During fiscal year 1999, we updated both the print and the web version of the Handbook, recognized as one of the most helpful and popular Federal resources ever published, and work is underway to release the new 2000–2001 edition this summer. Earlier this year, we held a series of focus groups to obtain feedback on the design and to get suggestions for new content areas. Corporate, education, and government contacts, as well as consumers and congressional caseworkers, all lauded the Handbook and encouraged FCIC to continue widespread promotion and distribution. These discussions led to a decision to rename this document the Consumer Action Handbook to reflect how the book gives people the information they need to take action. FCIC's upcoming television public service advertising campaign will highlight the new Consumer Action Handbook and encourage consumers to call for a free copy or to use the electronic edition on the FCIC web site.

Demand for consumer information continued to increase during fiscal year 1999. Since our web site went up in fiscal year 1995, FCIC has continuously expanded and improved its content and design, and page accesses have increased from one million in fiscal year 1995 to 9.5 million in fiscal year 1999. Also in fiscal year 1999, the FIC program responded to over 2.7 million calls about Federal programs and services. In total, requests for printed publications, web site page accesses, and FIC calls are expected to exceed 20 million in fiscal year 2000.

Not only has consumer demand increased, I'm pleased to report there is a high level of satisfaction with our services. During fiscal year 1999, the National Partnership for Reinventing Government commissioned the first-ever comprehensive federal customer satisfaction survey. Customers of twenty-nine federal agencies were surveyed to determine how well they felt they were being served. CIC earned a score of 77 out of a possible 100, ranking well above the average federal agency score of 68.6 and the average private sector score of 72. With the addition of the FIC national call center, an expanded and enhanced web site, and the new edition of the Consumer Action Handbook, I'm confident that citizens will be increasingly satisfied with FCIC services in the years ahead. Whether it's explaining government benefit programs, sharing the results of federal research, or helping consumers solve their marketplace problems, FCIC will make it easier for citizens to find trustworthy answers to questions about everyday life.

Mr. Chairman, again I thank you for the privilege of appearing on behalf of the Federal Consumer Information Center to present its budget request for fiscal year 2001. I hope that the Committee will agree that FCIC is a valuable Federal program and that it will look favorably upon our request.

SELECTIVE SERVICE SYSTEM

PREPARED STATEMENT OF THE GIL CORONADO, DIRECTOR

INTRODUCTION

The Selective Service System (SSS) entered Year 2000 without any Y2K difficulty, continuing its long tradition of service to America, and with great enthusiasm about new endeavors on its horizon. The Agency's accomplishments for fiscal year 1999 reflect the professionalism of its full-time and part-time employees along with the dedication of its nearly 11,000 part-time civilian volunteers. I am proud to say that the Selective Service stands ever ready to fulfill its statutory missions should the President and the Congress authorize a return to a draft. But, even more exciting are the Agency's new initiatives, underway and planned, which will enable it to play an even greater role in direct support of Armed Forces recruiting and accessions processing. This means that Selective Service will provide not only America's time-proven defense manpower insurance for war, but will also contribute to embellish America's national defense needs each and every day.

Although Selective Service is a small Agency with a modest annual budget, it does far more than its size and funding level suggest. For present and future generations of America's young men, it represents a very critical link between society-at-large and today's volunteer military. It also is a reminder that, as Americans, every young man is personally responsible for "providing for the common defense," that he defend our Nation as his fathers, grandfathers, and great grandfathers have so gallantly done in the past. And it is through the SSS structure that every American community plays a positive role in providing for that common defense. Today, nearly 11,000 volunteer Board Members are appointed, trained, and standing by in America's counties, cities, and towns to respond to a national crisis that might mandate a return to a draft. To ensure fairness and equity, each Board is a melting pot of civic-minded men and women representing the racial, cultural and ethnic diversity of the young men in the communities they serve. And they form the unique bond between grass roots America and the U.S. Armed Forces.

The President's budget request for fiscal year 2001 proposes funding the SSS at $24,480,000. This is a slight increase over the current fiscal year, but is considerably less than actual appropriations received from fiscal year 1983 through 2000. It has only been through adjusted fiscal priorities, reduction of full-time staffing, and the adoption of state-of-the-art information technologies over the years, that the SSS has been able to perform, enhance and accomplish its statutory responsibilities without interruption.

Millennium Change Uneventful for Agency Computer Systems

The SSS and its automated systems entered the new millennium without problems. The challenge faced by the Agency during the last year of the 20th Century was to ensure the continuous operations of its systems during the century rollover and plan for likely failure contingencies. Our computer systems were modified, tested and validated by an independent contractor to be Y2K compliant. A Business Continuity and Contingency Plan was also developed to provide direction and corrective action alternatives in the event of any system failure.

Achieving High Registration Compliance Remains a Challenge

As pointed out previously, ensuring that men who should be registered do indeed register remains difficult. Overall, our estimate of national registration compliance rates have eroded an additional percentage point since last year at this time. Estimated compliance now stands at 88 percent for 18- through 25-year-old males and 93 percent for 20- through 25-year-old males. This is frustrating for Selective Service because although greater numbers of men register each year, there is an ever increasing male population to reach. Other factors contributing to the decline include: increases in non-registered immigrants, and our inability to fund sustained public awareness activities and programs that promote the registration requirement. Additionally, the 88 percent statistic is troubling because the public may justifiably believe that any draft now with less than 90 percent registration compliance will not be completely fair or equitable. Expressed in school terms, this program needs to be graded "A" or "A-minus" when it comes to registration compliance; not "B" or "B-plus." Today, an estimated 12 percent of the men who should be included in the pool of registrants are not there simply because they do not know about the requirement. This also means that the men who have complied with the law are that much more vulnerable to be called in a future draft.

The Agency is countering this decline with an array of small-cost registration initiatives which embrace smart business practices, new technology, partnering with other governmental organizations, and tailored outreach. Several recent examples stand out. Beginning in June 1999, the SSS implemented convenient telephonic registration. Additionally, operating hours for on-line registration through the Internet were expanded. Both services are available six days a week, including Federal holidays. Additionally, SSS now has volunteer High School Registrars in over 78 percent of the America's high schools, an increase from the 53 percent of schools with registrars just three years ago. The Agency also implemented an innovative policy change to permit 17-year-old men to submit registration information. Under this "Early Submission" program, SSS holds the data on file and processes it automatically as men reach age 18. Also, SSS has increased its special mailings program to young men, especially those in major low compliance areas of California, Texas, Florida, and New York. The Agency has also increased the number of uncompensated registrars serving in programs under the Joint Training Partnership Act/Workforce Investment Act and at Farmworkers Opportunity Program sites. We also are especially proud of our partnership agreement between SSS and the Immigration and Naturalization Service (INS) which resulted in the implementation of a new program just last month. Now, immigrant men completing an INS Form I–485

for residency status will automatically be registered with SSS if they are 18 through 25 years old. This new program, along with Website registration information and posters in Chinese, English, Korean, Spanish, and Vietnamese, should go a long way toward increasing registration compliance in our Nation's immigrant communities.

Currently, 28 states and the Commonwealth of the Northern Mariana Islands link eligibility for state student financial assistance and state employment to a man's compliance with the SSS registration requirement. SSS continues to be responsive to requests for information relating to these state laws, as well as to inquiries from 51 cities and counties with parallel ordinances.

Another area of emphasis to ameliorate the downward trend in registrations is the Agency's brand-new educational outreach initiative. The concept is simple and powerful. Through it, the Selective Service is partnering with key organizations that represent teachers, counselors, principals, curricula developers, and secondary and post secondary institutions nationally to "institutionalize" registration within America's high schools. As part of this effort, the SSS plans a media event this spring, during which the Director of Selective Service, the Secretary of Education, and an array of educational groups will highlight the importance of registration compliance. Additionally, a new high school video and companion audio version for school public address systems have been developed as Public Service Announcements (PSAs) to showcase the Federal registration requirement. These TV PSAs, made with the participation of lieutenant governors of the States of California, Texas, and Florida, will help supplement our registration awareness kits, which include a hot link diskette to the Selective Service website. A different version of the video for the rest of the U.S., featuring the Secretary of Education, will be released this Spring. These materials will help facilitate on-line registration and are being distributed to all of the nation's high schools.

Immediate Peacetime Relevance

Aside from its mobilization role, today's SSS is proving its peacetime relevance through two new exciting and timely initiatives. The first of these is an approved program in which SSS will directly support military recruiting. The U.S. Armed Forces are currently experiencing challenges in recruiting qualified individuals for military service. In fact, during fiscal year 1999, the Army, Navy, and Air Force missed their recruiting goals. While the Marine Corps achieved its recruiting objective, it was not without extraordinary effort. Recognizing the extremely difficult military recruiting environment and anticipating that Selective Service can play a positive supporting role, the SSS and the Department of Defense (DOD) agreed to form a cooperative interagency partnership for the purpose of encouraging young men to register and volunteer to serve America through military enlistments.

Today, both organizations are working together to provide high quality "leads" to military recruiters. Beginning this summer, the Selective Service System's acknowledgment mailings to all young men who have recently registered will be revised. The acknowledgment postcard currently in use, which provides each man with his proof of registration and official Selective Service number, is being replaced by a larger card enclosed in a mailing envelope that will include a promotional recruiting brochure produced by the DOD, and a mail-back postcard for new registrants to request more information about voluntary service opportunities in today's Armed Forces (Active Duty, National Guard, Reserve, and the Reserve Officers Training Corps).

The DOD believes this initiative is so important that the higher costs of the expanded acknowledgment mailings will be reimbursed to the SSS by DOD. Currently, nearly two million men reach age 18 in America every year, so approximately 40,000 pieces of mail from the SSS will be mailed to young men each week. This should generate a continuous flow of new leads for follow-up by military recruiters.

This new program provides distinct advantages over other or previous recruiting mailing programs using commercial lists. Because SSS mailings will be going directly to newly registered men, the address lists and birth dates are virtually 100 percent accurate. Additionally, the SSS envelope will not be confused with "junk mail" because it contains an official document important to each man—his proof of registration needed to obtain student loans, Federal jobs and job training and the outside of the envelope will be marked accordingly, so recipients are certain to open and view its contents.

This joint endeavor between the SSS and DOD fully supports the National Partnership for Reinventing Government's objective by capitalizing upon interagency resources to make government more efficient and economical to maximize service to the public.

Longer Range Utilization of Agency Capabilities

An even more ambitious partnership between the SSS and the DOD Office of Force Management Policy could result in a major realignment of several organizations involved in the Armed Forces accession process. Working together, the DOD and the SSS have developed a concept which, if implemented, will consolidate all military entrance processing under a single, new, umbrella agency. Some of the benefits include the elimination of redundant missions and functions, the option to reengineer the follow-on structural organization, new opportunities for civilian employment locally at more than 65 locations across the country, and the potential for cost-savings and other efficiencies in the out-years.

Bottom line, the concept recommends merging the resources and missions of the SSS, the Military Entrance Processing Command (USMEPCOM), and the DOD Medical Evaluation Review Board (DODMERB) into one new entity. This initiative is estimated to cover a three-year transitional period.

In the concept, the proposed new agency is given the working title of "Federal Entrance Processing Service," or FEPS. As proposed, FEPS would be an independent Federal agency with missions that include registering men as they reach age 18, conducting a draft in a crisis if authorized by the President and the Congress, processing and testing new recruits entering the Armed Forces in peace and war, and arranging physical examinations for Military Academy and Reserve Officer Training Corps cadets. As an independent agency, FEPS would be headed by a Director who reports to the President, but receives guidance, customer service standards, and performance criteria from the Secretary of Defense. Other alternatives are also being explored.

The creation of FEPS also would require passage of authorizing legislation by the Congress and funding under the annual Defense Appropriation.

The objectives driving development of this concept include: preserving peacetime SSS registration and the Agency's capability of conducting a fair and equitable national draft in a crisis; sustaining a more economical effectiveness of military entrance processing and support services, such as the Student Testing Program (ASVAB testing in the Nation's schools); civilianizing entrance processing so most of the military billets currently assigned to the three organizations will revert back to the Military Services for militarily-oriented reassignments; and consolidating all activities having the potential for overhead reduction to reduce duplication of efforts.

This concept was developed by an interagency team comprised of representatives from DOD, USMEPCOM and the Selective Service System. It has been approved by the Director of Selective Service, the Assistant Secretary of Defense for Health Affairs, and the Assistant Secretary of Defense for Force Management Policy. It continues to be staffed within the DOD.

Summary

Today, Mr. Chairman, the Selective Service System stands prepared to perform its crucial, time-tested responsibilities. The missions of this small Agency are even more fundamental to our national military strategy as the United States deploys its Armed Forces in ever more scattered world trouble spots and as recruiting and retention for our All Volunteer Force continue to be challenging. The Selective Service System is also determined to contribute to America each and every day. And its value is two-fold: prepared to respond during a crisis while aiding the DOD to solve its military recruiting issues. The SSS fiscal year 2001 appropriation request of $24,480,000 will be invested very prudently in one of the Nation's greatest security assets. Its rationale for existence and its credentials are the same: a compact structure with the means to provide manpower to our Armed Forces as required in a national emergency, and to do it fairly, equitably, and in a timely manner.

Your support of the President's Budget request will ensure that America maintains the SSS as a low-cost insurance policy against underestimating the nature and size of future threats our Armed Forces may face. With the ambitious programs and initiatives already underway, the Selective Service System is also paying important dividends today in better service to the Nation's youth, in direct support to the DOD and the All-Volunteer military, and to the American taxpayer.

Thank you, Mr. Chairman.

U.S. Court of Appeals for Veterans Claims

Prepared Statement of Frank Q. Nebeker, Chief Judge

On behalf of the Court, I appreciate the opportunity to present for your consideration the fiscal year 2001 budget of $12,500,000 for the United States Court of Appeals for Veterans Claims.

The Court's fiscal year 2001 budget request includes $895,000 requested by the Veterans Consortium Pro Bono Program (Representation Program). The Representation Program has provided its own supporting statement for its budget request.

The budget request of $12,500,000 reflects a $1,050,000, or 9 percent, increase over the combined funding for Court and Representation Program operations initially appropriated for fiscal year 2000. Initial appropriations to the Court for fiscal year 2000 were $11,450,000, but as a result of the final budget negotiations the Court incurred a $42,000 rescission.

First, we have budgeted for an increase in personnel compensation and benefits. The amount budgeted is based on Economic Cost Indicator (ECI) pay raises and locality pay. The ECI uses as a base an fiscal year 2000 pay figure reflecting a pay raise of 4.8 percent for nonjudicial personnel, including the total locality-pay adjustment for Washington area government employees. The budgeted fiscal year 2001 pay raise for nonjudicial personnel is 3.7 percent. A pay raise has also been budgeted for judicial personnel, but no locality pay was included. During fiscal year 2000, we received funding for 8 full-time equivalent (FTE) positions, above the fiscal year 1999 authorized level of 80 FTEs, for a total of 88 FTE positions. This funding permitted the Court to employ a third law clerk for each judge and an additional staff attorney in the Central Legal Staff (CLS). Seven of the additional FTE positions approved with the fiscal year 2000 budget are filled, and the Court anticipates that the eighth will be filled in May 2000.

Late in fiscal year 1998, as a result of the growing backlog of cases in the Court's CLS and in chambers, the Court comprehensively reevaluated its personnel requirements and determined that the increasing caseload necessitated hiring these additional staff for each judge and the CLS. The Court expects these new personnel to permit the Court to keep its backlog at a reasonable level. The growth in backlog developed as a result of a sustained high level in the number of cases filed in the Court during the last three years—following a sharp increase during fiscal year 1997. The Court is monitoring its experience with the augmented staffing and will determine whether any adjustment is needed in the case-processing staff in the Court's public office. The budget estimate for fiscal year 2001 requests full funding for the eight personnel added during fiscal year 2000 to maintain the Court's backlog of cases at a reasonable level, in order to keep it from growing further and causing dramatic delay in the resolution of veterans' and survivors' claims. Last year, I summarized the Court's caseload history to provide background. This summary is brought up to date (through fiscal year 1999) by the following table, which also appears on page 4 of the Court's fiscal year 2001 Budget Estimate. In addition, the table provides the number of Board of Veterans' Appeals (BVA) total denials, and the percentage relationship of the Court's caseload to BVA total denials:

	Fiscal year—								
	1991	1992	1993	1994	1995	1996	1997	1998	1999
BVA TOTAL DENIALS	25,082	10,946	9,734	6,194	6,407	10,444	15,865	15,360	14,881
APPEALS TO USCAVC	2,223	1,742	1,265	1,142	1,279	1,620	2,229	2,371	2,397
APPEALS AS PERCENT OF DENIALS	8.9	15.9	13.0	18.4	20.0	15.0	14.0	15.4	16.1

Although the table reports BVA total denials, appeals to the Court come from the pool of cases in which the BVA has denied some of the benefits sought by claimants. Because the BVA does not report the number of its cases in which it denied some, but not all, benefits, the pool of BVA decisions from which appeals to the Court can arise is significantly larger than is reflected by the number of BVA total denials in the above table. Furthermore, since the 1992 enactment of legislation extending the Equal Access to Justice Act (EAJA) to the Court, there has been an ever-increasing number of EAJA applications (in fiscal year 1999, there were more than five times the number of EAJA applications than in fiscal year 1995). Recently, there has been a substantial increase in the number of cases where the Secretary is challenging the application, thus requiring substantially more Court and chambers effort to resolve EAJA applications.

Another factor affecting the Court's workload is the continued effect of unrepresented appeals. Unrepresented appeals still pose a challenge, although the percentage of such appeals dropped in fiscal year 1999. The percentage of appeals filed by unrepresented appellants remained almost constant at 74 percent in fiscal year 1996 and 73 percent in fiscal year 1997, down from its highest level—80 percent—in fiscal year 1995. In fiscal year 1998 the trend was upward, with 77 percent of appeals filed by unrepresented appellants; however, in fiscal year 1999 that figure dropped to 65 percent. This rate remains much higher than the unrepresented civil appeal rate in U.S. courts of appeals. The rate is not surprising because nearly half of the claimants who were denied all benefits by the BVA were unrepresented there, or were represented by organizations that do not provide representation before the Court. In addition, by law, attorney fees may not be charged for representation until the BVA has rendered a final decision on a case. Although by the time of merits disposition the rate of unrepresented appeals in fiscal year 1999 was reduced to about 42 percent, all unrepresented cases require extra processing attention as they progress through the development of the record on appeal and briefing stages.

To move cases expeditiously and with integrity is, and must be, the Court's goal. I believe that the 88 FTE staffing level will permit us to reduce an unacceptably high backlog and maintain a reasonable pending caseload. The delays at the Board level and in the VA General Counsel's Group VII (the group within the VA General Counsel's staff that handles litigation before the Court) must not be allowed to occur at the Court's level of adjudication where the cost of remediation is relatively small, as compared to that for enhanced staffing at the BVA and in VA General Counsel Group VII. The requested 88 FTE positions are required to maintain timely and careful case processing and dispositions for benefits claimants seeking judicial review, particularly those who come to the Court unrepresented.

In addition to personnel requirements, the Court's fiscal year 2001 budget request reflects funding to continue revision and upgrade of the court's automated case-management system to accommodate changes in the Court's processes and to make docket sheets available to the public via the Court's Internet Website. The fiscal year 2001 budget request also includes funding to upgrade personal computers and file servers used by Court personnel to keep pace with the technical requirements of carrying out the Court's mission.

Finally, over the past three years, I have urged that the Representation Program be authorized and funded outside the Court's appropriation. However, the Appropriations Committee's consideration of the Representation Program's request as separate from the Court's budget request and the removal of discretion from the Court over the Program's funding level has separated the Court, to the greatest extent possible under current legislation, from direct involvement in the Program. Accordingly, consistent with Congress' direction, the Court has forwarded to the Congress the Representation Program's own supporting statement for its fiscal year 2001 request for $895,000 as an appendix to the Court's submission and, also consistent with that direction, is including that amount, without Court evaluation or comment, in the Court's total fiscal year 2001 budget request.

In conclusion, I appreciate this opportunity to submit this testimony on the Court's budget request for fiscal year 2001. On behalf of the judges and staff, I thank you for your past support and request your continued indulgence.

EXECUTIVE OFFICE OF THE PRESIDENT

COUNCIL ON ENVIRONMENTAL QUALITY

PREPARED STATEMENT OF GEORGE T. FRAMPTON, CHAIR

Mr. Chairman, Senator Mikulski, members of the Subcommittee: I am pleased to forward to you President Clinton's fiscal year 2001 budget request for the Council on Environmental Quality (CEQ) and the Office of Environmental Quality (OEQ) (hereinafter collectively referred to as CEQ). The President's request is the same as in fiscal year 2000—$3,020,000 and 26 Full Time Equivalent (FTE) staff positions, an increase of $204,000 over CEQ's enacted fiscal year 2000 budget. The increased budget request reflects the President's ongoing commitment to an invigorated CEQ that fully satisfies its statutory obligations under the National Environmental Policy Act (NEPA).

Before outlining for you some of CEQ's major accomplishments this past year, and our objectives for the coming year, I would like briefly to describe our agency, the role it plays in the Federal family, and how we have defined our mission under the leadership of President Clinton.

CEQ marked its 30th year on January 1, 2000. Congress established the CEQ in 1969 with strong bipartisan support amid growing concern about the state of our environment. In 1970, Congress passed the Environmental Quality Improvement Act, establishing the Office of Environmental Quality (OEQ) to provide professional and administrative support for the Council. NEPA, the statute that established CEQ and defined its goals and responsibilities, is truly a landmark law. It declares it to be the policy of the Federal government "to use all practicable means and measures * * * to create and maintain the conditions under which man and nature coexist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans." CEQ strives to serve those ends in a number of ways. The agency advises and assists the President in developing environmental policies and legislation; assesses and reports on trends in environmental quality and recommends appropriate response strategies; coordinates the environmental activities of all federal agencies and departments; fosters cooperation among federal, state and local governments, the private sector and the public; oversees agency implementation of the environmental impact assessment process; and mediates disputes regarding the adequacy of such assessments and the policy judgments inherent in them.

This is an ambitious portfolio for a small agency, and one of utmost importance to our Nation. Thirty years after Congress so wisely sought fully to integrate environmental concerns into federal decision making, our challenges have grown only more daunting, and the need for innovative solutions all the more imperative. Our actions are guided by three core principles. First—and this is clear in the very words of our authorizing statute—our goal is not to balance the environment and the economy as if they are competing interests, but rather to demonstrate their fundamental interconnection. The choice between the economy and the environment is a false one. The economy and the environment can and must go hand in hand. Second, we must move beyond the chronic conflict that too often characterizes environmental decision making and forge collaborative approaches that meet our common needs. And third, we must devise innovative, common-sense solutions that achieve the greatest protection for our environment while minimizing the burden on taxpayers and the regulated community.

I am pleased to report that CEQ has made great strides in advancing these principles, both as we carry out our day-to-day responsibilities and through focused efforts to reshape federal environmental programs.

CEQ is working to reinvent the way government goes about protecting our environment. For instance, CEQ has helped forge public-private partnerships to protect water quality through incentives to landowners and to produce the cutting-edge technology that will triple the fuel efficiency of the American car. We are encouraging collaborative efforts to protect habitat before species become endangered and to avoid future flood damage by offering communities a range of options in preparing for and responding to floods. We are promoting job creation through support for the $180 billion-a-year environmental technology industry. We are working with federal agencies to streamline regulations and environmental reviews, saving precious time and taxpayer dollars. We played a critical role in formulating the Administration's climate change policy, which harnesses market forces to achieve cost-effective reductions in greenhouse gas emissions. We've expanded our response to the climate change problem by more fully integrating advanced coal and natural gas technologies into our climate change program as a climate related investment. The fiscal year 2001 budget includes a total of $232 million (of which $56 million is part of Climate Change Technology Initiative) to support the Department of Energy's aggressive R&D effort to develop next generation technologies for the combustion and use of coal and natural gas. Part of this response is a request of $19.5 million for carbon sequestration research, significantly more than the $9.2 million appropriated in the fiscal year 2000 budget. The Administration's International Clean Energy Initiative (a $200 million multi-agency effort) will provide new incentives for clean energy technology innovation and export; advanced coal generation will help developing countries build a clean energy future while providing jobs here at home.

CEQ is working to break gridlock and resolve longstanding disputes. For instance, CEQ has continued to oversee the Administration effort to resolve the impasse over dredging in the Port of New York and New Jersey as well as to work with other ports and concerned Members of Congress on infrastructure needs, permitting issues, and dredge material disposal.

CEQ is working to formulate comprehensive policy and coordinate the environmental actions of all federal agencies. For instance, CEQ has led an inter-agency effort to complete a Supplemental Environmental Impact Statement to guide the transfer and development of the Homestead Air Base in a manner consistent with the Administration's commitment to the economic well-being of the community dev-

astated by Hurricane Andrew and with the protection of Biscayne and Everglades National Parks. CEQ is working with federal agencies to promote and improve economic development and employment opportunities that can be created from environmental initiatives; and continues to work to improve and streamline the regulatory processes for interstate gas pipeline permitting.

CEQ provides an institutional avenue to address special needs and concerns that cannot be addressed in a timely manner without with discipline and focus that CEQ can bring to the process. For example, the successful implementation of the Food Quality Protection Act (FQPA) requires federal agencies and other stakeholders to work together to ensure that sound decisions are made that protect public health while taking into consideration the needs of pesticide users. In order to help meet the early challenges of FQPA implementation, CEQ worked with USDA and EPA to help establish the Tolerance Reassessment Advisory Council (TRAC) to enhance stakeholder input on FQPA implementation. Through TRAC, agricultural, public health, and pesticide user communities were provided with an appropriate forum for increased involvement in the decision making process, and the process has benefited significantly as a result.

Finally, CEQ is working to restore and preserve precious environmental values for future generations of Americans. Over the past year, we have continued to play a critical role in efforts to protect Yellowstone, the Everglades, and our oceans.

In fiscal year 2000, CEQ has an approved level of 24 FTE positions. Our staffing level is nearly one-third below the total allowed by the fiscal year 1993 enacted level, which itself was less than half the historic peak for the agency. I believe the fiscal year 2001 budget request will permit CEQ to fulfill its statutory requirements and make continued progress toward the goal of common-sense, cost-effective environmental protection.

Partnership Program

In fiscal year 2000, CEQ began to initiate a major new effort to assist federal departments and agencies in responding to requests from states, metropolitan and local governments, and businesses for partnership opportunities. With additional funding in the fiscal year 2001 budget, CEQ will be able to expand this program and continue responding to these requests: to promote smart growth, where local governments have already developed plans and are seeking federal partners; to protect open space including greenways in urban, suburban, and near-urban areas; to promote the retention of agricultural land near expanding residential areas in traditional agricultural use; to protect sensitive habitat in the context of metropolitan, regional, and ecosystem planning; and to promote, advise and assist in the clean up and restoration of bays, estuaries, and rivers.

These programs pose new partnership opportunities, as well as additional potential challenges for CEQ.

The President's budget proposals provide the resources that state and local governments and community leaders need to advance local and regional initiatives for environmental protection in partnership with the Federal government. Building more effective partnerships increases the need for the leadership and discipline CEQ can bring to issues that involve numerous agencies with very different missions. This is illustrated by our involvement in our ongoing major partnerships include the following: the Natural Communities Conservation Planning (NCCP) process in which Orange, San Diego, and Riverside Counties in southern California are doing comprehensive planning with cities, real estate developers, environmentalists, businesses and scientists and the federal government to avoid future Endangered Species Act and Clean Water Act mandates; Everglades Restoration; the use of Habitat Conservation Plans (HCPs) with timber companies in the Southeast and Northwest; restoration of the San Francisco Bay-Delta (CALFED; and the protection of Sterling Forest in New York and New Jersey.

We believe that there are additional opportunities for more effective partnership. This new partnership approach could foster many additional opportunities. For example:

—The Governors of California, Oregon, Washington and Alaska and several tribes have asked for federal funding to help states implement and develop coastal salmon restoration plans. They have also asked for federal coordination by the Acting Chair of CEQ to ensure that the federal agencies are working together in a partnership with the state on these important plans. The Executive of King County and the mayors of Seattle and other cities around Puget Sound have asked for a similar effort to assist their MetroSmart Growth Initiative in a way that also helps them and major businesses in the area recover salmon as well as preserve open space and plan urban and suburban densities.

—In New England, CEQ has worked closely with the State of Maine, the Maine Congressional Delegation and other states to support state efforts to purchase easements protecting the working forests from development. This initiative would seek to preserve the quality of rivers and lakes, working forests, open spaces, promote sustainable economic development, and ensure public access to recreation for millions of Americans—not only those of the region but those within a days drive of these vast forests.

—As issues of watershed degradation, loss of open space and agricultural land, and sprawl attract the attention of more Americans as a premiere "quality of life" issue, urban metropolitan and state governments which bear the principal responsibility for addressing these issues are seeking federal funding, federal technical assistance, and limited strategic use of federal mandates to make their jobs easier (or, in some cases, remove federal barriers to solutions).

Only CEQ in many cases can provide the coordinated federal agency response that is helpful in forging these partnerships. No single individual at CEQ is tasked to respond to these initiatives. We have launched this important effort on a limited basis and continue to believe that with additional resources we can fulfill a bigger need which will pay countless dividends to state and local governments and their business and environmental partners.

Accomplishments of the Council on Environmental Quality

Over the past year we have endeavored to live up to the promise of NEPA—exercising fully our responsibility to coordinate policy and resolve disputes, advancing a new way of doing business, promoting consensus-based decisions, providing advice and guidance, responding to emergencies and resolving interagency disputes as early as possible, thus avoiding the need for more formal, time consuming processes. We also have worked very hard to respond to matters raised by the Congress last year. This portion of my testimony will report on some of our achievements during the past year and on those projects that we hope to accomplish in the coming year.

Statutory Integration

CEQ is identifying sites to pilot integration of compliance requirements under a range of statutory authorities and programs. The purpose of this effort is to develop local, on-the-ground models of comprehensive environmental planning that build on the objectives and principles explored by the Center for Strategic and International Studies (CSIS), the National Academy of Public Administration, the Keystone Center, and others (see The Environmental System in Transition: Final Report of the Enterprise for the Environment (CSIS 1998)). Ideally, these models would provide more effective resource protection strategies while offering greater certainty and flexibility to the regulated community. In many cases, initial planning done under the Endangered Species Act, particularly for Habitat Conservation Plans, can be the building block or the model for more comprehensive approaches that pilot a "no surprises" approach incorporating a broader array of statutory requirements. The following examples suggest promising areas for this approach.

—*Pacific Northwest*.—Successful coordination among Federal, state, and tribal resource agencies to respond to threatened and endangered salmon has established framework for regional coordination under the Endangered Species Act and the Clean Water Act. An integrated approach would expand this model to integrate remedial work under Superfund and the Natural Resource Damage programs and offer expedited resolution of compliance and restoration issues for responsible parties.

—*Southern California*.—Constituents in the Santa Ana Watershed have asked for CEQ's assistance in integrating agricultural and clean water requirements in the area. Residents in Irvine and Newport, California, have asked for CEQ's assistance in expanding their Natural Communities Conservation Plans (HCPs in Orange County and San Diego County) under the Endangered Species Act (administered by the Department of the Interior and the National Oceanic and Atmospheric Administration) to incorporate a comprehensive wetlands management plan under the Clean Water Act (administered by the Army Corps of Engineers and EPA).

—*NEPA and the Magnuson-Stevens Act*.—Successful coordination between the eight fisheries management councils established under the Magnuson-Stevens Act and the responsibilities of the National Marine Fisheries Service and the Secretary of Commerce to satisfy NEPA is essential to conserving and protecting our nation's fisheries and fishing industry. CEQ is leading the councils and NMFS toward a full and lawful implementation of NEPA's requirements through the council process that will help avoid shutdowns of fisheries and support sound decisionmaking.

Dispute Resolution

CEQ is a mediator between agencies and our efforts often prevent stalemates and litigation.

The U.S. Institute for Environmental Dispute Resolution, established by Congress in 1998, opened for business in fiscal year 1999. The Institute is authorized to resolve environmental disputes among federal agencies or between a federal agency and a non-federal party, as well as offer training and other services associated with alternative dispute resolution. Congress placed the Institute under the auspices of the Morris K. Udall Foundation, which was established in 1992 as an independent agency of the Executive branch. The Institute is governed by the Foundation's Presidentially-appointed, Senate confirmed board. Because the Institute's role is linked to the NEPA and CEQ's role in interagency dispute resolution, Congress made CEQ a non-voting ex officio member of the Udall Foundation Board when it created the Institute. In that role, CEQ has been helping to advise the leadership of the Institute as it establishes its program. In addition, under the authorizing legislation, CEQ must concur in the use of the Institute by Federal agencies in Federal interagency matters.

CEQ helped in mediating a conflict when the State of Hawaii and the Island of Maui sought to expand the existing Maui airport to allow an increase in the number of flights into Maui, and, more importantly, allow direct flights from outside the Hawaiian Islands to land in Maui without first stopping at the Honolulu Airport. The Maui airport expansion was very important to promote the tourist economy. When the Final EIS on the project was ready to be issued, the National Park Service voiced serious concerns about the Federal Aviation Administration's treatment of invasive alien species. To avoid a potential referral under NEPA, CEQ convened a high-level working group to review the problems surrounding invasive alien species and worked with the FAA and the NPS to develop a mitigation plan that would both allow the airport construction and protect Maui and its parks from invasions of alien plant and animal species. We continue to work with the State of Hawaii, the NPS and the FAA to assure that the mitigation is carried out in a manner that is faithful to the agreement.

CEQ chairs an interagency working group that seeks to find a solution to a very polarized debate regarding brucellosis and bison in the greater Yellowstone ecosystem. This issue reached a crisis during the winter of 1997 when thousands of starving bison, suspected of carrying the brucellosis disease, left Yellowstone in search of food and scores were killed by the state. CEQ is working with the agencies, cattlemen conservationists, and the State of Montana in discussing ways to ensure that brucellosis is not spread to cattle and that bison remain a viable part of the Yellowstone ecosystem in order to produce a final environmental impact statement on bison management. CEQ worked to secure money from the Land and Water Conservation Fund to finalize the purchase of additional winter range for wildlife that can be used to prevent unnecessary slaughter of Yellowstone bison.

CEQ has worked with the Department of Energy, the Department of the Interior, the Ute Indian Tribe and the State of Utah on the transfer of lands and minerals in the Naval Oil Shale Reserve Number 2, near Moab, Utah and the protection of the Green River. The agreement would transfer certain lands to the Tribe and others to the Department of the Interior and provide responsibility in the Department of Energy for the removal of uranium mill tailings.

The CALFED Bay-Delta process is successfully keeping the stakeholders in the region working together to address the water supply, water quality, flood control and habitat restoration efforts in northern California. These issues can and should be resolved at the regional level; CEQ has worked to resolve interagency disputes when they arise. Bay-Delta stakeholders—agricultural, industrial and urban water users and environmental groups—are involved in problem solving and developing long term solutions to restore fish and wildlife habitat, to improve flood protection, to provide adequate water supply to all users, and to ensure clean water. The CALFED Bay-Delta Program will select a final "preferred alternative" to meet the goals of the program in the summer of 2000 and begin program implementation in 2001.

Policy Coordination

As mandated by the National Environmental Policy Act, CEQ's role is to advise the President on environmental policy matters and coordinate activities of the federal agencies and departments with regard to environmental matters that cross agency jurisdictional lines. In the past year, CEQ has played a role in the development and coordination of policies that have more effectively integrated environmental, economic, and social objectives into federal decision making. Outlined below are a few recent efforts undertaken by CEQ.

The Army Corps of Engineers is developing through the NEPA process a preferred alternative to change the management of the Missouri River in a manner which provides greater environmental and recreational benefits along the river while protecting navigation interests. CEQ is involved in the development of a preferred alternative which balances the needs of the upstream and downstream states and helps resolve disagreements among the affected eight states and their constituencies.

CEQ helped to resolve a highly visible and longstanding interagency conflict that had prevented construction of the Doppler Radar, a lifesaving weather radar installation for JFK and LaGuardia airports. The final solution allowed the construction of the radar while improving the surrounding urban national park.

CEQ has been involved in the resolution of disputes among several federal agencies regarding a variety of Army Corps of Engineers projects along the Mississippi River, including the Yazoo Pumps project, the Big Sunflower maintenance project, the White River navigation project, and the St. Johns/New Madrid project. CEQ has reviewed NEPA documents associated with these projects and the consistency of the projects with wetlands protection goals of the Administration set forth in the Clean Water Action Plan. CEQ has also worked with other federal agencies on the development of programs aimed at providing economic relief to some of the areas affected by these projects.

CEQ is working across federal agencies to promote and improve economic development and employment opportunities that can be created from environmental protection initiatives. For example, CEQ is working with the Forest Service, the Bureau of Land Management and the U.S. Fish & Wildlife Service to improve and expand the "Jobs in the Woods" program. This program has had a successful beginning in the Pacific Northwest and can be applied to other regions of the country. It is our goal to see quality jobs created for local workers while doing needed restoration work on public lands. CEQ is also working with state, local, and tribal governments in various regions in the country to promote and assist in economic development and diversification for local economies which have been dependent upon the use of natural resources. Examples of this are Southeast Alaska, the Interior Columbia Basin, and the Northern Forest region in New England.

In 1999 we made significant progress in furthering the 1996 Administration Everglades Restoration Plan. On July 1, 1999, Vice President Gore presented to Congress the Army Corps of Engineers Comprehensive Restoration Plan, then known as the Restudy. CEQ will be leading the development of legislation to authorize the plan and the initial suite of restoration projects. In addition, CEQ coordinated the expenditure of the remainder of the $200 million provided to the Department of the Interior in the 1996 Farm Bill for the acquisition of land for restoration purposes, including the Talisman lands in the Everglades Agricultural Area. CEQ has also helped resolve disputes among federal agencies involving impacts of the management of water pending authorization of the Comprehensive Plan on various lands and interests and upon habitat and federally listed species, such as the Cape Sable seaside sparrow.

In the period leading up the World Trade Organization (WTO) Ministerial meeting in December 1999 in Seattle, CEQ co-chaired with the National Economic Council an interagency staff committee on International Economic Policy and the Environment. Among the results of this policy development process was Executive Order 13141 under which the United States Trade Representative (USTR) will conduct a written review the environmental issues associated with certain major trade agreements, including multilateral trade rounds, bilateral or plurilateral free trade agreements, and certain additional trade liberalization measures. CEQ and USTR have joint oversight of implementation of the Executive Order and will co-chair a process to develop more specific operational guidelines under the order in consultation with the public and Congress. In addition, CEQ and USTR oversaw a written environmental analysis of the Accelerated Tariff Liberalization (ATL) measure in forest products which was forwarded to the WTO for further negotiation by the Asian Pacific Economic Cooperation (APEC). Technical work on this analysis was led by the U.S. Forest Service and the Environmental Protection Agency and agency staff conducted briefings for Congressional committees and the public during the process of developing this review.

A New Way of Doing Business

The Clinton Administration is committed to reinventing the way government operates so that it works better and costs less. CEQ continues to take the lead in reinventing federal environment policy by encouraging approaches that work to reduce burdens, break gridlock, provide incentives, and build partnerships with state and

local government and the private sector. Below are some examples of how CEQ accomplishes this task.

Since 1997, CEQ has worked actively to implement the National Environmental Technology Strategy and support the U.S. environmental technology industry. This industry represents a $200 billion sector of our economy responsible for more than 1.2 million jobs in 60,000 firms nationwide. CEQ oversees the Interagency Environmental Technology Office (IETO) that provides a one-stop-shop for businesses, universities, NGO's, and state and local government seeking information on federal environmental technology programs. Over the past year, the office has helped over 300 businesses connect with federal environmental technology programs. CEQ is presently developing a virtual roadmap of all federal environmental technology programs that will be available on the Web. We have started an initiative on electronic commerce that will link environmental businesses with municipal governments seeking innovative solutions to their environmental problems. On the international front, two events are planned (for fall 2000) that will bring together U.S. environmental technology firms with counterparts in Europe and Japan to explore joint ventures and partnerships across a wide range of technologies.

A Federal advisory committee composed of state and local officials, business leaders, environmentalists, and others last year completed its work by issuing its final report and organizing a national conference known as the National Town Meeting. The May 1999 report, entitled Towards a Sustainable America, made a series of recommendations for action to be taken on climate change, environmental management, metropolitan and rural strategies, and international issues. The National Town Meeting, which capped six years of work by PCSD, demonstrated broad support from many sectors and strengthened bipartisan efforts to address sustainability issues. Over 3,500 people gathered in Detroit from May 2–5, 1999 to participate in the plenary sessions, 160 "learning sessions," the extensive exhibit hall, and other special events. An estimated 120,000 people also participated through 121 concurrent events around the country, with 60,000 of these linking to Detroit via satellite. NTM events included top leaders from all sectors—business, NGO, civic, and government—as well as many elected officials from both parties. Michigan governor John Engler, Detroit Mayor Dennis Archer, Wayne County Executive Edward McNamara, General Motors Vice-Chairman Harry Pierce, and Reverend Joseph Barlow served on the Host Committee Representatives John Conyers, Joseph Knollenberg, John Dingell, and Carolyn Kilpatrick of Michigan's Congressional delegation also participated. Senator Christopher Bond and Governor Christine Todd Whitman of New Jersey addressed the conference through prepared videos.

Following the National Ocean Conference in Monterey, California in June 1998, the federal agencies were charged with producing—within one year—a national policy for oceans issues. CEQ worked with the Departments of Commerce, Navy, the Interior, State, Defense, and EPA, the National Science Foundation and others to formulate this set of recommendations. Published as a formal report, "Turning to the Sea" set forth background issues, concerns and recommendations in twenty-five different categories, ranging from freedom of navigation to marine protected areas. Based on the recommendations of the report, an Oceans Report Task Force was established to implement some of the recommendations, and this Task Force is co-chaired by CEQ and the National Security Council. Under the Task Force's guidance, agencies are now preparing action agendas to move the recommendations forward into concrete actions.

The introduction and spread of invasive species in the United States is a major ecological and economic problem for diverse environments and economies in the United States. Invasive species are generally considered to be the second biggest threat to native wildlife (following habitat destruction). Approximately $5 billion per year are spent by ranchers and farmers in this country for noxious weed control, and indirect costs in losses to crop and rangeland productivity are estimated at about $7.4 billion per year. Utilities spent $3.1 billion over the last ten years to control invasive species. To address this difficult problem in a coordinated, systematic manner, the President issued Executive Order 13112 on invasive species in 1999. The Order establishes an interagency Invasive Species Council to coordinate federal efforts to address this problem, as well as an advisory committee to involve state, tribal and local governments, scientists, commercial interests, conservation organizations and academic institutions in developing and implementing solutions. In fiscal year 2000, CEQ will be working with the Invasive Species Council to develop guidance on prevention and control of invasive species and restoration of native species in the context of the environmental analyses for projected actions.

NEPA Reinvention

One of the overarching goals of CEQ is to achieve higher levels of environmental protection with lower costs and less red tape. CEQ has made important strides in improving the way NEPA operates both in the day-to-day administration of NEPA and through the more fundamental implementation of NEPA itself. CEQ worked with several agencies throughout the year to provide advice and assistance in revising their NEPA regulations and procedures to make the environmental impact analysis process more efficient and effective. For example:

—During fiscal year 1999 CEQ reviewed and approved a new NEPA handbook for the General Services Administration. The handbook is an excellent integration of NEPA law and policy as applied to GSA's many functions, and we believe it can serve as a model for other agencies.

—During fiscal year 1999 and to date in fiscal year 2000, we have reviewed and approved changes to the National Park Service's NEPA procedures and to the Department of the Interior's NEPA manual.

—Additionally, we have reviewed changes to NEPA procedures proposed by the Bureau of Reclamation, U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service. We will shortly be reviewing proposed changes to the Department of the Navy's NEPA procedures. In the coming months we expect the Army to issue its draft revised regulations for public comment.

—CEQ worked with the Department of Energy to follow up in their ongoing NEPA reinvention efforts. The 1998 symposium hosted by the National Association of Public Administrators (NAPA) and NAPA's final report reviewed those efforts and identified further opportunities. The final report and follow-up actions will be the basis of a "efficient and effective NEPA practices/lessons learned" forum for federal agency NEPA liaisons that will be held in the coming year.

—CEQ issued a Memorandum to Heads of Agencies in the summer of 1999 providing information to all federal agencies of their responsibility to determine whether appropriate state, local or tribal agencies are interested in being designated as "cooperating agencies" for purposes of preparing environmental impact statements. The Memorandum clarified the role of state, local and tribal governments as cooperating agencies and encourages Federal agencies to include state, local and tribal agencies as cooperators when they have either jurisdiction or expertise relevant to the environmental, social or economic impacts associated with a proposed federal action.

—CEQ continues to work with the Federal Highway Administration, Federal Transit Authority, and transportation stakeholders to implement the mandates of the Transportation Efficiency Act (TEA–21 Act). In particular, we are committed to assisting federal and state agencies involved in transportation decisionmaking to better integrate the NEPA process with other environmental review processes and to identify and resolve potential problems on issues as early as possible. CEQ is working with the transportation agencies as they revise their planning procedures and NEPA procedures to better fit the requirements of TEA–21, and we expect those procedures to be published in draft for public review and comment soon. We also worked with the American Association of State Highway and Transportation officials to identify and recognize best practices in environmental partnerships throughout the country.

—CEQ has been working with the National Oceanic and Atmospheric Administration to integrate the NEPA process into the National Marine Sanctuaries' management plan revisions. The majority of the nation's twelve National Marine Sanctuaries are beginning to revise their management plans. CEQ is working with the sanctuary managers and NOAA headquarters to establish a blueprint for moving forward with revisions in an organized, efficient and timely manner.

—Along with other recommendations regarding the NEPA reinvention project, CEQ will work with the appropriate agencies to expedite review of natural gas pipeline projects. CEQ has supported the Federal Energy Regulatory Commission decision to modify ex parte requirements for purposes for the environmental impact assessment process.

Mr. Chairman, Senator Mikulski and members of the Subcommittee, as the Acting Chair of CEQ, I am committed to continue the work that our agency was chartered to do 30 years ago. CEQ plays an important role in making sure that the federal family speaks with one voice on environmental issues. With the modest additional resources that we have requested, we can fulfill this role with an even greater effectiveness. I look forward to working with you in the coming year.

Thank you for the opportunity to forward my statement to the Subcommittee.

NEIGHBORHOOD REINVESTMENT CORPORATION

PREPARED STATEMENT OF GEORGE KNIGHT, EXECUTIVE DIRECTOR

Thank you, for the opportunity to submit written testimony to you, and for your long-time commitment to community revitalization demonstrated through your many years of support for the Neighborhood Reinvestment Corporation and its affiliated network of community-based nonprofit organizations—known as the NeighborWorks® network. I am honored to share with this distinguished panel the exciting results of fiscal year 1999, update you on our progress to date in fiscal year 2000, and present the Corporation's fiscal year 2001 budget request of $90 million.

FISCAL YEAR 1999—HIGHLIGHTS

Fiscal year 1999 represented a milestone year for the Neighborhood Reinvestment Corporation—once again reaffirming that local folks, given the resource of a flexible revolving loan fund, and the support of conventional lenders and insurers, can and will make large positive differences in their communities. The NeighborWorks® system, now comprised of more than 200 community-based nonprofit organizations, relies on Neighborhood Reinvestment's ability to provide seed capital grants for locally managed revolving loan funds, practical technical assistance, hands-on how-to-do-it training, and an effective secondary market that can return your appropriations investment many fold in the form of leveraged private sector investment in our nation's distressed communities—whether they be rural, small town or densely urban.

In fiscal year 1999 Neighborhood Reinvestment and the NeighborWorks® network used the $90 million appropriation to:

—Leverage more than $1 billion in direct total investment in distressed neighborhoods ($946 million of which came from private lenders along with resources provided by local governments, leveraged by $88 million in local revolving loan funds);
—Assist 26,000 families to purchase or maintain their homes;
—Manage over 20,000 affordable rental or mutual housing units (thousands of them formerly vacant and blighted properties);
—Counsel nearly 61,000 potential homebuyers; and
—Sponsor thousands of community revitalization efforts across the country, such as anti-crime organizing, youth training and employment, and economic development business loans.

To support these outstanding accomplishments, the Neighborhood Reinvestment Corporation and Neighborhood Housing Services of America (NHSA):

—Added 16 new organizations to the NeighborWorks® network, for a total of 202 local partnership organizations serving more than 1,000 communities—48 percent of which are rural;
—Purchased $46 million in loans through NHSA, replenishing local NeighborWorks® organizations' revolving loan fund capital;
—Conducted 180 detailed program risk management reviews of local NeighborWorks® organizations;
—Provided 162,000 training contact hours for practitioners and leaders in community development;
—And, in further evidence of the maturation of the system and the quality of NeighborWorks® lending, Standard & Poor's, for the first time ever, awarded a "AA" rating to a $75 million security backed by non-conventional, affordable, nationally dispersed, residential mortgages in NHSA's portfolio.

FISCAL YEAR 2000—GOALS AND ACCOMPLISHMENTS TO DATE

Given the tremendous success of fiscal year 1999, and the powerful infrastructure that has been built and refined over many years, we continue to set high standards and goals for fiscal year 2000. Even at the reduced fiscal year 2000 funding level of $74.7 million, our goal is to:

—Attract over $1.1 billion in investment to NeighborWorks® communities;
—Assist over 28,000 families to purchase or maintain their homes, and over 3,400 families to secure long-term mutual and multifamily rental housing;
—Counsel 67,000 potential homebuyers; and
—Add 12 organizations to the NeighborWorks® network, expanding our reach to 1,100 communities.

In 1998 the NeighborWorks® Campaign for Home Ownership 2002 was launched with a goal of putting 25,000 lower-income families into home ownership. In fiscal year 1999 additional funds were appropriated to expand that goal by 10,000. The

Campaign raised the goal again in fiscal year 2000 by 5,000—bringing the goal to 40,000 families over a five-year period.

It's with great delight that I can report to you, the Homeownership Pilot you funded has clearly demonstrated enormous success—and should continue to be supported.

To summarize the NeighborWorks® Campaign for Home Ownership 2002 progress toward its five year goals:

NEIGHBORWORKS® CAMPAIGN FOR HOME OWNERSHIP 2002

GOALS (1998–2002)	21-MONTH RESULTS (35 percent of the way through the Campaign)
Create 40,000 new homeowners	Created 13,800 homeowners—35 percent of goal.
Generate $2.9 billion in investment	Generated $1.2 billion in investment—41 percent of goal.
Counsel 270,000 potential homebuyers	Counseled 100,726 households—37 percent of goal.
Establish 50 HomeOwnership Centers	Opened 23 HomeOwnership Centers—46 percent of goal.

The especially good news is who is being served. The profile of NeighborWorks® homebuyers is markedly significant when compared to the profile of those served by government-backed loan programs or by the conventional mortgage market.

DEMOGRAPHIC PROFILE OF NEIGHBORWORKS® HOMEBUYERS

[In percent]

Characteristics of Homebuyers	NeighborWorks® Loans	Government-Backed Loans	Conventional Loans
Minority	54	31	15
Female head-of-household	41	20	18
Below 80 percent of MSA median	67	45	24
Income of Borrower:			
Percent $15,000 or less	6.7	1.4	1.7
Percent $15,001–$25,000	31.5	11.8	7.9
Percent $25,001–$35,000	30.7	23.3	11.8
Percent $35,001 or more	31.1	63.5	78.6
90-day loan delinquency (as of 9/30/99)	1.06	1.55	0.27

Additionally it should be noted that 95 percent of the NeighborWorks® clients are first-time buyers, many of them first generation buyers. And, that for 30 percent of the families, owning is less or only marginally more costly than renting. Home prices range from $25,000 in Buffalo, New York to $140,000 in Orange County, California.

One of the keys to this outstanding success is the locally directed revolving loan funds operated by NeighborWorks® organizations. One-third of new homeowners were assisted with NeighborWorks® revolving loan funds—with the median loan being $4,300.

Using Revolving Loan Funds to Create Homeowners in Rural Areas

A challenge facing Neighborhood Reinvestment and the NeighborWorks® network is how to best use scarce resources to reach large, sparsely populated rural areas desperately in need of assistance. In rural Montana a model is emerging that can do just that!

The Neighborhood Housing Services of Great Falls, in partnership with local lenders, Realtors®, the Montana Board of Housing, and especially the Resource Conservation and Development Areas (RC&D—a USDA program), is making home ownership a reality for hundreds of families in tiny towns and rural areas throughout Montana.

In order to combat the many obstacles to working in rural areas—like how to provide homebuyer education and counseling to families scattered over thousands of square miles, find financing for nonconventional buyers (when even conventional financing is almost nonexistent), service/monitor the loans, etc.—we needed to be particularly creative.

What did Neighborhood Reinvestment do? To start, we provided technical assistance to the Great Falls Neighborhood Housing Services as they thought through how to best serve families across the entire state. We helped facilitate meetings of their current and potential partners. We provided critically needed seed grant funds for their revolving loan fund. Through the Neighborhood Reinvestment Training Institutes, we conducted a specially designed course to teach the RC&D folks how to provide homebuyer counseling. And NHSA stands ready to purchase the non-conventional, revolving loans originated by Great Falls Neighborhood Housing Services, at par.

How does it work? The RC&D folks structure local homebuyer education classes for prospective first-time homebuyers to provide the necessary financial literacy and pre-purchase counseling. Realtors® assist in the home purchase. Local lenders package the first mortgage. The NHS of Great Falls provides, when necessary (about 70 percent of the time), a second mortgage from their revolving loan fund to fill the gaps of needed repairs or a portion of the closing costs. The second mortgage, made from the NHS of Great Falls' revolving loan fund, is often sold to NHSA, the NeighborWorks® secondary market vehicle, allowing those funds to recycle so that they can be re-lent to others.

The early results of this innovative partnership are astonishing! During 1999, the NHS of Great Falls assisted 2½ times the number of families to acquire or maintain their homes, compared to 1998 (from 134 in 1998 to 339 in 1999). A great percentage of the families assisted earn between $15,000 and $18,000. To understand the potential of this approach it's important to realize that this partnership has allowed the NHS of Great Falls to expand its services from the City of Great Falls to, as of this date, 84 small towns and communities scattered throughout the vast State of Montana. This approach has been so successful that we believe it should be replicated, so that other rural states might also benefit. We are currently working with RC&D in several other Western states to replicate this effort. I look forward to reporting our progress on this exciting opportunity!

Use of Technology in Rural Areas

In a major technological breakthrough for rural community revitalization, four Vermont NeighborWorks® organizations are operating their newly established NeighborWorks® HomeOwnership Centers using a shared virtual office on the Web. These organizations are: Rutland West Neighborhood Housing Services, Burlington Community Land Trust, Gilman Housing Trust and Rockingham Area Community Land Trust. Despite the miles that separate them, having a common Web-based work area provides the NeighborWorks® organizations with a vehicle for sharing solutions to difficult issues and trading information about which marketing methods work best in their HomeOwnership Centers.

Several rural NeighborWorks® organizations are considering expanding the use of virtual offices to facilitate interaction among rural NeighborWorks® organizations nationwide.

LOOKING AHEAD TO FISCAL YEAR 2001

The past year has seen interest rates rise by 1 percent. Will rates continue to rise? If so, what will be the impact on the distressed communities the NeighborWorks® network serves? In many communities, aggressive lending tactics, referred to as "predatory lending practices", are taking their toll on individuals and neighborhoods. For NeighborWorks® organizations, delinquency and foreclosure prevention is increasingly important if the reinvestment gains that have been made are to be held. The future will be most bright if we are best prepared for the downsides.

Locally controlled revolving loan funds, coupled with Neighborhood Reinvestment's technical assistance, training and NHSA are a powerful combination. Working together we have attracted conventional capital and outstanding local leadership, and devised solutions to critical issues.

Going forward, strategic financial and technical support for NeighborWorks® revolving loan fund operations is the best method to capitalize on the strong capacity of the NeighborWorks® network, as well as protect against the inevitable fluctuations in capital markets and the overall economy.

To maximize the positive impact that the NeighborWorks® system has had on the lives of thousands of lower-income Americans and to significantly increase the flow of private capital to distressed markets, the Corporation is seeking a $90 million appropriation for fiscal year 2001. Such an appropriation would permit the NeighborWorks® network to keep up—and accelerate—the unprecedented pace that has been made possible by investments made in past years.

DEMONSTRATING A CONSISTENT INCREASE IN PRODUCTION

	Fiscal year—				
	1993 Actual	1995 Actual	1997 Actual	1999 Actual	2001 Goal
Total Investment	$223,000,000	$358,000,000	$553,000,000	$1,000,000,000	$1,300,000,000
Total Housing Units	6,762	8,803	11,407	15,890	18,700
Training Contact Hours	49,410	91,176	121,219	162,835	160,000
Appropriation	$29,000,000	$39,000,000	$50,000,000	$88,000,000	$90,000,000

In fiscal year 2001, Neighborhood Reinvestment will further enhance local revolving loan funds through capital grants. This will enable NeighborWorks® organizations to continue to expand the opportunities for home ownership, as well as assist existing low-income homeowners who need assistance with rehabilitation.

By replenishing revolving loan funds, local NeighborWorks® boards of directors can continue to fashion and tailor strategies to meet rapidly evolving loan needs without "approvals" from Washington. In the distressed, lower-income communities served by NeighborWorks® organizations, the revolving loan fund is often the only source of affordable, flexible and completely locally directable capital available. Unleashing local creativity bears enormous fruit. And, building on past success is crucial to creating a climate for broader reinvestment.

Several NeighborWorks® communities are currently involved in the use of Section 8 for home ownership, combined with conventional lending and use of their revolving loan fund. Based upon the strong interest and support generated by these initial "demonstration" efforts, Neighborhood Reinvestment has begun to explore ways of expanding this promising strategy.

Neighborhood Reinvestment will also, in fiscal year 2001, focus on "not losing ground." Communities need to be prepared to respond to economic downturns that impact everyone, including individuals who may already be struggling.

Despite the opportunities for increased first-time home purchases that have been afforded by the current interest-rate environment, in some cases overly aggressive (predatory) lending practices have left families (and neighborhoods) at risk of losing their homes. Among those who are likely to be most vulnerable are families with limited financial reserves who have purchased "fixer-uppers" that are in need of more substantial repairs than anticipated, and financially unsophisticated families who are tempted by unscrupulous offers of debt consolidation, equity withdrawal and over financing.

Additionally families can fall behind when a job is lost, or if they experience divorce or medical judgements. In the face of such challenges, NeighborWorks® organizations' staff provide, usually uncompensated by anyone, financial counseling to reduce delinquency and prevent foreclosure.

Finally, the Corporation will continue to expand the capacity of those NeighborWorks® organizations that now own and/or manage over 20,000 units of long-term affordable mutual and rental housing. Some of these organizations have formed a joint entity to expand their efforts to increase their ownership stock. The Corporation has the opportunity to strategically invest in this effort to raise asset management and resident service standards so that more families, who do not own their own home, can affordably and permanently rent in their communities with pride.

THE NEIGHBORWORKS® SYSTEM

In order to clarify how we plan to meet these ambitious goals, I want to provide some background on how the NeighborWorks® system operates and what makes it successful.

The NeighborWorks® Network

At the heart of this system is the NeighborWorks® network which, as of December 30, 1999, consisted of 202 locally directed partnerships composed of community residents, the business and public sectors, serving more than 1,000 communities nationwide. Often known as Neighborhood Housing Services, each NeighborWorks® organization's local board of directors establishes strategies for revitalization of their neighborhoods and community. NeighborWorks® organizations share common characteristics:

—Local residents, financial and business sector leaders, and public officials serve on each local organization's board of directors;

—All NeighborWorks® organizations are state-chartered, not-for-profit organizations with 501(c)(3) tax-exempt status;

—They operate a flexible revolving loan fund;
—They work with conventional lenders to develop flexible loan products;
—They promote physical, economic and social revitalization of designated target areas;
—They create and sustain affordable housing;
—They must meet Neighborhood Reinvestment's stringent chartering and ongoing performance guidelines; and
—They develop and support strong resident leaders who work to enhance the viability of their communities.

Neighborhood Reinvestment Corporation

Created by Congress in 1978 (Public Law 95–557), Neighborhood Reinvestment's mission is to encourage, support and facilitate these organizations' efforts to revitalize distressed communities through the local public/private partnerships. We do this through:
—Technical assistance—delivered by specialized practitioner experts geographically placed around the country in nine district offices;
—Flexible grants—to capitalize and operate revolving loan funds;
—Training—"how-to," nuts-and-bolts coursework for community-based practitioners; and
—Our secondary market, Neighborhood Housing Services of America (NHSA)—a special-purpose secondary market backed by national investors. This ensures the local liquidity of revolving loan funds.

We also manage the risks inherent in the NeighborWorks® system through a multifaceted risk management system. In essence the risk assessment/management system backs up strong local board leadership that monitors local financial controls, programmatic activities and program changes.

Neighborhood Housing Services of America

The NeighborWorks® system's unique secondary market, Neighborhood Housing Services of America (NHSA), serves as a financial backstop to local NeighborWorks® organizations' loan funds. Each NeighborWorks® organization may sell loans to NHSA at whatever rate and term is locally affordable. This kind of secondary market outlet ensures a continuous source of capital through the local revolving loan fund, which, in turn, enables local organizations to utilize the plentiful private sources of capital that are available for conventional lending.

Last year $88 million in revolving loan funds lending sparked an additional $946 million in coordinated private and public lending—resulting in over $1 billion in total direct investment. NHSA enables us to continuously meet the capital liquidity needs of the NeighborWorks® network.

Together, Neighborhood Reinvestment and NHSA assist in the growth and capacity development of local NeighborWorks® organizations to meet the capital, technical and organizational needs of their communities.

REVOLVING LOAN FUNDS

The engines that drive this system are the flexible local revolving loan funds managed by each local NeighborWorks® organization. Neighborhood Reinvestment provides seed capital to attract additional capital that may come from local banks, insurance companies, local government, foundations and other investors. Each NeighborWorks® organization sets its own underwriting terms and policies. The loans made from the revolving loan funds fill the gaps in an otherwise-fragmented set of resources available to lower-income borrowers. Local determination of best use and the flexibility of these funds are the critical resource for broader community revitalization. For example, the revolving loan funds are used for:
—Gap financing—used in conjunction with conventional loans to assist families rehabilitate and purchase their homes;
—Equity capital—to secure blighted properties for rehabilitation and sale, secure mutual or rental units as well as purchase property for rehabilitation or development;
—Major rehabilitation, minor repair and emergency loans—used to help existing very low-income and frequently elderly homeowners maintain their homes and avoid the predatory lending scams that often target this population;
—First and second mortgage loans—for those buyers who cannot fully qualify conventionally. These loans are tailored to the buyers' ability to repay;
—Down-payment and closing cost assistance—for first-time homebuyers; and
—Economic development—for small business start-up or expansions.

The revolving loan funds serve both as a capital resource for the community and as a way of attracting and securing additional private investment in distressed com-

munities. In fiscal year 1999, investment from NeighborWorks® revolving loan funds hit an all-time high of $88 million—making possible $946 million in lending from other, principally private, sources.

CONCLUSION

The NeighborWorks® system has proven to be an effective mechanism over time to revitalize distressed communities nationwide. It has improved its efficiency and effectiveness over its 20-year history in leveraging limited public funds with private capital. In 1994, total public- and private-sector investments totaled $268 million; in 1999, however, total investments in distressed communities amounted to more than $1 billion, leveraging nearly $12 for every dollar appropriated by Congress.

In fiscal year 2001 and beyond, the NeighborWorks® system will continue to support local distressed neighborhoods and communities in rural, small town, suburban and urban areas, and strive to continually demonstrate what a truly valuable public investment you have made!

We are extremely grateful for the Committee's support and look forward to a successful year and continued opportunities in fiscal year 2001.

U.S. Consumer Product Safety Commission

Prepared Statement of Mary Sheila Gall, Vice Chairman

I support the fiscal year 2001 Budget Request of $52.5 million, which reflects an increase of $3.7 million over our fiscal year 2000 Appropriation.

I have consistently supported funding levels that maintain the activities carried on in previous years along with reasonable and pragmatic funding increases to support new initiatives. Historically, a 3 percent increase was needed merely to maintain services at the prior year appropriation level. But we have seen this fixed cost adjustment rise from 3 percent in fiscal year 1999 to 4 percent in fiscal year 2000. In fiscal year 2001, an increase of 5.4 percent is needed to maintain services at the fiscal year 2000 level.

This substantial adjustment is due largely to statutory pay and benefit increases ($2.8 million), a sizeable increase in our GSA space rent ($307,000), restoration of operating expenses cut in fiscal year 2000 ($388,000) and non-compensation related cost increases ($196,000) due to inflation.

The proposed fiscal year 2001 budget allows us to maintain operations at the fiscal year 2000 level, but does not allow for increases to fund critical investments necessary to implement improvements. Because we are a data driven agency, we depend on our data collection, analysis and laboratory testing. Each year we have had to scale back on our attempts to improve our laboratory equipment and keep our data information systems up to date. I hope that, with budgetary surpluses presently projected, that these deficiencies can be rectified in upcoming fiscal years.

Prepared Statement of Thomas H. Moore, Commissioner

Mr. Chairman, Ranking Member, and Members of the Subcommittee, I am very pleased to again have this opportunity to submit testimony in support of our appropriations request. The full details of our fiscal year 2001 appropriations request are set out in our budget document and I fully support our request as presented.

For next year we are requesting $52.5 million, which is a modest $3.7 million increase over our actual fiscal year 2000 allocation. This request for 2001, if fully funded, would allow the U.S. Consumer Product Safety Commission (CPSC) to again sustain a proven safety program that has continuously helped to minimize the exposure of American families, particularly children, to unsafe and hazardous consumer products. However, our budget request does not incorporate important future investments in critical laboratory development, vital research initiatives, and much needed information technology. I feel that it is unfortunate that the full potential of this agency, once again, will not be realized because of the limitations placed upon it by its funding.

By all measures, CPSC provides both tremendous service and tremendous value to the American people. Each year through reductions in deaths, injuries, and other costs associated with unsafe products, such as health care costs and property damage, CPSC saves the nation many times the agency's annual budget. Our agency is the major factor in the 30 percent decline in the rate of deaths and injuries related to consumer products since 1974. Yet, despite its proven effectiveness, CPSC must continue to forego additional product safety related initiatives that will en-

hance its ability to protect the American public. Our fiscal year 2001 request again will simply keep our successful safety programs operating at their current levels.

Notwithstanding, in recent years, the U.S. Consumer Product Safety Commission has been very successful in addressing the unreasonable risk of harm posed by many, many consumer product. For example, our work has prevented about 40,000 injuries and reduced societal costs by over $800 million each year by removing dangerous fireworks from the marketplace. There is a continuously growing public awareness and regard for the work that is performed at CPSC. Clearly, this growing regard for the results of our efforts is due to great leadership and, very definitely, to the hard work and skills of our professional staff, and to their intense dedication to our mission.

In order to sustain that effort and successful funding of our appropriations request is needed. Therefore, I strongly urge the Subcommittee to appropriate the full $52.5 million requested.

PREPARED STATEMENT OF ANN BROWN, CHAIRMAN, U.S. CONSUMER PRODUCT SAFETY COMMISSION

Mr. Chairman, and members of the Subcommittee, I am Ann Brown, Chairman of the U.S. Consumer Product Safety Commission (CPSC). With me today are Vice Chairman Mary Sheila Gall, Commissioner Thomas H. Moore and members of the Commission staff.

I am pleased to have this opportunity to testify in support of our fiscal year 2001 appropriation request of $52.5 million. As you may know, last year I was confirmed by the Senate for a full seven-year term on the Commission. I look forward to directing our strategic plan for reducing deaths and injuries from consumer products to a successful conclusion, and to continuing my efforts to forge an ever more effective partnership among business, consumers and government so that all the consumer products we use in and around our homes will be safe for the children and families of America.

UPDATE ON UPHOLSTERED FURNITURE, SLEEPWEAR AND DEATH CERTIFICATES

Before I begin my testimony on our budget, I want to give you a brief update on the two tasks given us by the conferees on our fiscal year 1999 appropriations. As you recall, Section 423(a) of the fiscal year 1999 Conference Report directed us to contract with the National Academy of Sciences (NAS) within 90 days for a 12-month study of the potential toxicologic risks of all flame-retardant chemicals identified by the NAS and the Commission as likely candidates for use in residential upholstered furniture. These chemicals could be used to comply with our draft proposed regulation for flame resistance of this furniture. We entered into the contract with the NAS prior to the deadline on January 15, 1999.

Accordingly, we expected the NAS study to be delivered to us in January, 2000. However, in early January, the NAS advised us that it would be unable to complete the study by the due date. The NAS staff informed us the study would not be submitted to us until April. I regret this delay and assure the Subcommittee the delay is not due in any way to CPSC, but is solely the responsibility of NAS. We will send the study to the Subcommittee promptly after we receive it.

Section 429(a) of the Conference Report directed us to propose for comment within 90 days, a revocation of the amendments to the children's sleepwear standard issued on September 9, 1996. The proposed revocation was published in the Federal Register on January 19, 1999, prior to the deadline. Section 429(c) directed us to promulgate a final rule revoking, maintaining or modifying these sleepwear amendments by July 1, 1999. On June 28, 1999, the Commission voted 2–1 to reaffirm the 1996 amendments.

FISCAL YEAR 2001 BUDGET

For fiscal year 2001, the Commission is requesting an appropriation of $52.5 million. This is an increase of $3.5 million over the amount Congress appropriated for fiscal year 2000. However, due to the 0.38 across-the-board budget reduction mandated by the final Continuing Resolution of 1999, (Public Law 106–106), the Commission is requesting $3.7 million over the amount we will actually receive in fiscal year 2000.

This request will only allow us to maintain the agency's current safety effort at 2001 prices. The requested increase includes raises for staff salaries and benefits ($2.8 million), restoration of operating expenses cut in fiscal year 2000 ($388,000),

and inflation only price increases for the non-salary costs of doing business, such as contract services ($196,000).

Most of the $2.8 million increase for staff salary and benefits is the cost of the President's proposed pay raise in fiscal year 2001. In addition, small amounts are included to fund: the planned 480 staff level; increased retirement costs as our employment base shifts retirement systems; increased costs of health benefits; and the continuation of programs designed to recruit and retain our highly skilled scientific and technical staff.

We were forced to cut operating expenses in fiscal year 2000 to reflect our reduced funding level, which is about $300,000 less than required for current services. We made additional cuts of about $88,000 because other operating expenses increased more than we anticipated. For example, as a result of widespread publicity for many of the agency's recalls, more consumers are calling our Hotline, increasing our telecommunications and contract costs. The expenses that we seek to restore include: hiring expert assistance in complex compliance investigations; travel in support of voluntary standards development; collection of additional injury data; replacing aging laboratory equipment; keeping our injury information systems up-to-date; and scientific training for staff. The agency's operating expenses are not large (less than 20 percent of our budget) but they play a vital role in providing the staff with resources needed to complete their work.

The space rent increase is a result of an across-the-board increase in rates charged by GSA for existing space. CPSC has not increased its space. In fact, the agency has taken substantial steps in recent years to lower our space requirement to today's level. Through the field telecommuting program, we have lowered our total rent cost by 25 percent. We continue to use a converted 50-year old former military installation to house our laboratory facility in Gaithersburg, Maryland.

The last increase necessary to maintain our current safety program is funding for price increases projected for the costs of doing business, excluding salary and space rent. These costs are those subject to annual inflation increases, such as travel, or specific contractual services that allow annual increases based on the Federal estimate of inflation.

In sum, our 2001 budget request will simply keep our successful safety program functioning at its current level. We are foregoing any of the critical investments we want to make to improve our programs. Over the years, CPSC has improved efficiency, reduced staff, and cut costs, such as rent, as much as possible. There is no "fat" in our budget. All that remains is bone and muscle. Accordingly, we urge the Subcommittee to appropriate the full $52.5 million requested.

THREE NEW SAFETY EFFORTS

I am pleased to announce that this year we are expanding our National Electronic Injury Surveillance System (NEISS) beyond consumer product-related injuries to include all injuries treated in hospital emergency rooms. This expansion was recommended in the 1998 Institute of Medicine study on injury in America. The Centers for Disease Control (CDC) was given $2 million in its appropriation for 2000 to fund the collection of this data at CPSC. The data will be available to all Federal agencies and will enable them to identify quickly emerging injury trends, and assist them in setting their priorities for future prevention and treatment programs. CDC's 2001 budget request includes another $2 million to keep this program going, and we expect that this funding will continue into the future. We believe our NEISS is the best in the Nation and are proud it was selected for this important public safety task.

Last December, we launched Operation S-O-S—Safe Online Shopping. We have a highly trained team of 10 experts monitoring the Internet for unsafe and illegal consumer products.

We have already found some violative products: flammable children's sleepwear; prescription drugs that can poison kids because they are not in child-resistant packaging; children's jackets with drawstrings that can catch and strangle a child; and novelty cigarette lighters that are designed to appeal to kids and are not child-resistant. Just this month, we recalled about 4,000 non-child-resistant lighters that the task force found advertised on the web.

We have found unsafe toys on the web too. We found an unsafe toy for sale on both Amazon.com and E-Toys just before the holidays—it had small balls that a child under three could choke to death on, and we recalled them.

The Internet is an increasing part of the information we receive about unsafe consumer products. In just one year, from 1998 to 1999, the number of Internet reports more than doubled.

For the past six years I have made a special effort to protect the smallest and most vulnerable citizens, our children. As part of this effort, I have focused on the prevention of sudden infant death syndrome (SIDS). Last year CPSC, together with the American Academy of Pediatrics and the National Institute for Child Health and Human Development, issued a safety alert warning the public about the hazards to young babies of suffocation from soft bedding. Since then, our staff has worked with several major retailers of soft bedding for babies to develop a plan that would communicate this safety information to consumers when they shop. I am pleased to say that on March 15, I announced that seven major retailers, representing the majority of baby bedding sales, would cooperate with us in this effort. I commend IKEA, J.C. Penney, Kmart, Lands' End, Sears, Target and Babies "R" Us for ensuring that their crib displays, catalog spreads and advertising will show only safe bedding practices. This is another example of my strong belief that voluntary cooperation between business and government is the best way to improve consumer product safety.

CONCLUSION

Mr. Chairman and Members of the Subcommittee, despite all the progress the Commission has made, and is making, in reducing deaths and injuries related to consumer products, they remain a major, national problem. Every year there are about 22,000 deaths and 29.5 million injuries, resulting in total damage to the nation of over $500 billion. The CPSC is the only agency with the authority to prevent hazardous consumer products from killing and injuring our people, and where necessary, to enforce the laws against them. Your investment of $52.5 million in the CPSC will be returned many times over in lives saved and injuries averted. We will use these funds efficiently and effectively to safeguard the health and safety of the American people.

AMERICAN BATTLE MONUMENTS COMMISSION

PREPARED STATEMENT OF GEN. FRED WOERNER, USA (RETIRED), CHAIRMAN

Mr. Chairman and Members of the Committee: Thank you for the opportunity to testify on our fiscal year 2001 Appropriation Request. The special nature of the American Battle Monuments Commission places it in a unique and highly responsible position with the American people. The manner in which we care for our country's Honored War Dead is, and should remain, a reflection of the high regard in which we, as a nation, respect their service and sacrifice.

As you know, the American Battle Monuments Commission is a small, one-of-a-kind organization, that is responsible for commemorating the services of American Armed Forces where they have served since April 6, 1917 (the date of U.S. entry into World War I) through the establishment of suitable memorial shrines; and for designing, constructing, operating, and maintaining permanent American burial grounds in foreign countries. In performing these functions, the American Battle Monuments Commission administers, operates, and maintains twenty-four permanent memorial cemeteries and twenty-seven monuments, memorials, and markers in the United States and fifteen countries around the world.

We have eight World War I and 14 World War II cemeteries located in Europe, the Mediterranean, North Africa and the Philippines. All of these cemeteries are closed to burials except for the remains of the War Dead who may occasionally be discovered in World War I or World War II battlefield areas. In addition, we are responsible for the American cemeteries in Mexico City, established after the Mexican War, and in Panama.

Presently, 124,914 U.S. War Dead are interred in these cemeteries—30,921 of World War I, 93,243 of World War II and 750 of the Mexican War. Additionally 5,857 American veterans and others are interred in the Mexico City and Corozal (Panama) American Cemeteries. Commemorated individually by name on stone tablets at the World War I and II cemeteries and three memorials on U.S. soil are the 94,120 U.S. servicemen and women who were Missing in Action, or lost or buried at sea during the World Wars and the Korean and Vietnam Wars.

We continue to provide services and information to the public, friends, and relatives of those interred in, or memorialized at ABMC cemeteries and memorials. This includes information about grave and memorialization sites as well as location, suggested routes, and modes of travel to the cemeteries or memorials. Immediate family members are provided letters authorizing fee-free passports for overseas travel to specifically visit a loved one's grave or memorial site. Annually, over 10 million people visit our locations worldwide, half of which are American. Photographs of

headstones and sections of the Tablets of the Missing on which the service person's name is engraved are also available. These photographs are mounted on large color lithographs of the cemeteries or memorials. In addition, we assist those who wish to purchase floral decorations for placement at a grave or memorial site in our cemeteries. A photograph of the in-place floral arrangement is provided to the donor.

The care of these shrines to our War Dead requires a formidable annual program of maintenance and repair of facilities, equipment, and grounds. This care includes upkeep of 131,000 graves and headstones; 73 memorial structures; 41 quarters, utilities, and maintenance facilities; 67 miles of roadways and walkways; 911 acres of flowering plants, fine lawns and meadows; nearly 3,000,000 square feet of shrubs and hedges and over 11,000 ornamental trees. Care and maintenance of these resources is exceptionally labor intensive, therefore, personnel costs account for nearly 61 percent of our budget for fiscal year 2001. Some of this maintenance is performed by casual labor, in peak seasons, since permanent cemetery staffs are not sized to provide all the required maintenance during the peak-growing season. The remaining 39 percent of our budget is required to fund our engineering, maintenance, utilities, equipment, and administrative costs.

As an organization responsible for permanent burial facilities, we do not have the option of closing or consolidating cemeteries. In light of this, we have increased our efforts to achieve greater efficiency and effectiveness, through automating and contracting, in the operational and financial management areas, where we do have alternatives. This Commission recognizes and fully supports the efforts of the President and the Congress to improve efficiency, focus on results, and streamline the government overall and in ABMC in particular.

In coordination with OMB, we recently completed work on our second Strategic Plan (fiscal year 2000–2004) and Annual Performance Plan (fiscal year 2000) as required by the Government Performance and Results Act. We will forward copies to the various Committees of the Congress. We believe these plans provide our agency a comprehensive roadmap for the future.

During fiscal years 1998 and 1999, as part of our Strategic Plan, and at the request of the Office of Management and Budget (OMB), we conducted the first comprehensive manpower study of our cemeteries since 1982. The results indicated a number of upgrades, downgrades, and new position descriptions were needed. Based on the survey results and with the concurrence of OMB, we implemented position downgrades and position upgrades in May 1999 for those positions requiring upgrade of one grade. Those positions requiring a second upgrade were accomplished in October 1999 (fiscal year 2000) and those requiring an additional upgrade will be accomplished in fiscal year 2001. Funding for the upgrades in fiscal year 2001 plus the adjusted personnel baseline is included in our fiscal year 2001 request.

During fiscal year 2000 ABMC and OMB began a joint productivity study to determine if automation, technology, and outsourcing improvements could reduce the growing costs of foreign employment. We have completed the preliminary phases of this study and are encouraged by the findings. It appears that opportunities exist through outsourcing, leasing, and equipment modernization to reduce workhours associated with labor intensive operations and thereby can potentially defer or offset manpower growth. In addition, the study pointed to a long standing drainage/surface water problem which must be evaluated and resolved prior to fielding many of the other solutions and improvements. (We are continuing to evaluate the results and will be conducting further assessments.)

During fiscal year 2001, we will begin an Infrastructure Modernization Program. Our cemeteries and their infrastructure range in age from 50 to 70 years old. With the help of Congress and the President over the last three years we have made progress in reducing our backlog of maintenance and engineering projects. We must now begin a concerted effort to examine the deep infrastructure of these aging facilities and execute a plan to modernize or replace worn out systems. The infrastructure Modernization Program will enable us to identify existing problems, avoid future problems and work in a more logical and efficient manner. The first phase of this program will establish a baseline by utilizing in-depth technical surveys of our installations. These surveys will be done by certified subject matter experts who will apply current standards, regulations, and technological advances to our facilities to determine what needs to be accomplished.

In 1996, Congress specifically directed (Public Law 104–275) that ABMC prepare agency-wide financial statements annually beginning with fiscal year 1997, and that the financial statements be audited by the U.S. General Accounting Office (GAO) in accordance with accepted government auditing standards. Our first audit resulted in an unqualified opinion on our balance sheet, which is not normally earned on initial financial statement audits. We were one of the first agencies in the Executive

Branch to "early comply" with the fiscal year 1998 accounting standards prescribed by the Office of Management and Budget in Bulletin No. 97–01, Form and Content of Agency Financial Statements. Our second audit also resulted in an unqualified opinion. We have recently completed the third audit and are awaiting the results.

As I reported to you last year, we contracted with the Department of Treasury's Financial Management Services Center regarding the replacement of our accounting system. During fiscal year 1998, we selected a new system which we had planned to implement in March of 1999. We proceeded with phased testing during the first two quarters of fiscal year 1999. Based on our experience, we discovered that the selected COTS system was in fact not capable of meeting the government approved Joint Financial Management Improvement Program (JFMIP) requirements. After numerous meetings with the contractor, Treasury Department, and the Commerce Department we terminated the delivery order. We are still intent on obtaining the efficiencies of a single, integrated accounting system for ABMC's worldwide operations. We are in the process of obtaining an independent assessment of our needs as compared to the COTS or other systems that may be available.

With our initial success in auditing and the anticipated implementation of a new financial system, we expect ABMC to achieve an even higher level of management excellence in the next two to three years.

In 1993, Congress directed the ABMC to establish a World War II Memorial in Washington, DC or its environs. It will be the first national memorial dedicated to the 16 million who served in uniform during World War II, the 406,000 who gave their lives, and the millions who supported the war effort from the home front. Congress provided legislative authority for siting the memorial in the prime area of the national capital, which includes the National Mall. The cost to design, build, and maintain the memorial is currently estimated to be approximately $100 million.

The Commission of Fine Arts (CFA), the National Capital Planning Commission (NCPC) and the Department of Interior approved selection of the Rainbow Pool site, a 7.4-acre rectangular area at the east end of the Reflecting Pool between the Lincoln Memorial and the Washington Monument. This prominent location is commensurate with the historical importance and lasting significance of World War II to America and the world. The memorial site was dedicated by President Clinton on Veteran's Day, November 11, 1995.

Friedrich St. Florian, an award winning architect based in Providence, RI, was selected to design the memorial through a two-stage, open competition through the General Services Administration's Design Excellence Program. President Clinton announced St. Florian's selection during a White House ceremony on January 17, 1997.

On July 24, 1997, in a public hearing, the CFA approved many elements of the memorial design concept, but voiced concern over the mass and scale of the concept as presented. The CFA unanimously reaffirmed the Rainbow Pool site and requested that the design be given further study and resubmitted at a later date. On July 31, 1997, the NCPC reaffirmed its approval of the site and, like the CFA, requested design modifications and an analysis of various environmental considerations.

On May 12, 1998, the National Park Service (NPS), on behalf of the ABMC, forwarded St. Florian's revised design concept to the CFA and the NCPC for their consideration and approval. On May 21, 1998, in a public hearing, the CFA "unanimously and enthusiastically" approved the location, site plan and revised design concept. On July 9, 1998, in a public hearing, the NCPC overwhelmingly approved the revised design concept. In May and June 1999, respectively, the CFA and the NCPC approved the memorial's preliminary design, successfully completing the second of a three phase design approval process.

The public fund raising effectively began in March 1997, when the ABMC announced the selection of former Senator Bob Dole as the National Chairman of the World War II Memorial Campaign. Joining Senator Dole in this endeavor was National Co-Chairman Frederick W. Smith, founder of Federal Express and Chairman, President and CEO of FedEx Corporation. The Capital Campaign fund-raising efforts were extremely positive during the last months of fiscal year 1997 and all of fiscal year 1998 and fiscal year 1999. As of January 31, 2000, $94.1 million had been raised from all sources, resulting in an account balance of $65.6 million after costs. As national awareness of the effort grows, the response of the giving public has been more positive.

In 1999 the World War II Memorial drive initiated a national public service ad campaign through the Ad Council that featured actor Tom Hanks. Cause-related marketing activities began with companies that expressed interest in bringing the Memorial to their consumer base. Films such as Saving Private Ryan substantially raised awareness of the sacrifices of the WWII generation and the planned recognition through the National World War II Memorial. Prominent corporate and public

sector leaders have been enlisted to assist with the solicitation and advocacy process.

The ABMC has established realistic and prudent estimates of the various giving constituencies. To date the campaign has been led by corporate and foundation giving, and we project continued positive response. Many corporations played an integral role in the World War II effort. Millions of interested and committed individuals are becoming involved in the respective campaigns of veterans groups. These groups are enthusiastically supporting the campaign.

Civic organizations are beginning to step forward with fund-raising goals for their respective memberships. An initiative to have each state contribute $1 for every person from the state that served in uniform during the war has exceeded our expectations. To date, twenty-six states have either contributed or pledged their support. Twenty-three states have committed to introduce legislation in fiscal year 2000. Individuals of affluence are being cultivated for major gifts and should accelerate the total level of support during calendar year 2000. Direct Mail has helped us educate the giving public and continues to provide a profitable return for each dollar invested. More than 355,000 individuals have participated to date.

During 1999, Congress approved several legislative items that support the World War II Memorial's fund-raising efforts. Public Law 106–117, signed November 30, 1999, authorizes ABMC $65 million in borrowing authority to assure timely construction of the Memorial and to comply with the requirements of the Commemorative Works Act (CWA). This authority and World War II Memorial's cash holdings may be used as available funding for the construction costs plus the 10 percent maintenance factor as required by the CWA in obtaining the Secretary of Interior's approval for a construction permit. The legislation also: extended the authorization for initiation of Memorial construction to December 31, 2005; granted ABMC permanent authority to solicit and receive funds and preserves any such funds in ABMC controlled interest bearing Treasury Accounts, including any funds remaining after completion of the Memorial; and increased ABMC's authority to accept volunteer services and to use intellectual property interests. In addition, Public Law 106–58, signed September 29, 1999, makes the ABMC and the World War II Memorial Advisory Board (MAB) eligible to use nonprofit standard mail rates with respect to official mail sent in furtherance of soliciting funds and support for the creation of the National World War II Memorial.

While our attention has been focused on management improvements and the design and construction of the World War II Memorial, we have not ignored our primary mission of operating and maintaining twenty-four memorial cemeteries and twenty-seven monuments, memorials, and markers.

The Congress has been instrumental in our success in maintaining a high standard of excellence by providing the funds required to accomplish our objectives. The additional funding of $3 Million in fiscal year 1998 $2.5 Million in fiscal year 1999, and $2.0 Million in fiscal year 2000, for engineering and maintenance projects, allowed us to significantly reduce our backlog of essential projects. We are constantly reviewing our backlog list and have developed a revised list for fiscal year 2000 and beyond. We now have a total of 451 projects with a total estimated value of approximately $7.5 Million. We have grouped together certain types of projects, such as sprinkler systems, replacement of fuel tanks, and repair of roadways and walkways, in order to achieve economies of scale. Grouping these projects by region has and will allow contractors to consolidate bids and provides ABMC with the most cost-effective use of managing available resources.

Our fiscal year 2001 request provides $2.2 Million for engineering and $1.0 Million for infrastructure modernization. During December 1999 severe windstorms swept through Europe causing damage estimated at approximately $1.0 million. The cost of the cleanup will impact our planned engineering and maintenance projects.

Our request also provides for cost of living increases for our U.S. and foreign national personnel, funding for the Infrastructure Modernization Program, Operational Efficiency Improvements and the Accounting System. We have focused our fiscal year 2001 program to ensure we accomplish these essential high priority projects.

For the fourth year, in agreement with the Office of Management and Budget, we have repriced our budget to conform to the Fiscal year 2001 foreign currency rates established by the Department of Defense.

Since 1923, the American Battle Monuments Commission's memorials and cemeteries have been held to a high standard in order to reflect America's continuing commitment to its Honored War Dead, their families, and the U.S. national image. The Commission intends to continue to fulfill this sacred trust while ensuring the prudent expenditure of appropriated funds.

The American Battle Monuments Commission appropriation request for fiscal year 2001 is $26,196,000.

This concludes my prepared statement. I will be pleased to respond to your questions.

NONDEPARTMENTAL WITNESSES

[CLERK'S NOTE.—The following testimonies were received by the Subcommittee on VA, HUD, and Independent 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.

DEPARTMENT OF VETERANS AFFAIRS

PREPARED STATEMENT OF THE AMERICAN HEART ASSOCIATION

STILL NUMBER ONE

Heart attack, stroke and other cardiovascular diseases have been the leading cause of death since 1919. Nearly 60 million Americans—1 in 5—suffer from one or more of these diseases. Hundreds of millions of Americans have major risk factors for cardiovascular diseases—about 50 million have high blood pressure, 40 million have high blood cholesterol (240 mg/dL), 49 million smoke, 106 million adults are obese or overweight and 10 million have physician-diagnosed diabetes.

Cardiovascular diseases cost Americans more than any other disease. This year, Americans will pay an estimated $327 billion for cardiovascular-related medical costs and lost productivity.

Chances are heart attack or stroke will be the death or disabler of you or someone you love. Heart attack, stroke and other cardiovascular diseases are America's No. 1 killer and a main cause of disability. Cardiovascular diseases account for nearly 1 of every 2 American deaths.

While heart disease and stroke occur at all ages, they are most common in Americans over age 65—an age group that is now about 13 percent of the U.S. population and will be 16.5 percent by year 2020. By the year 2020, the percentage of veterans over 65 years of age will be about three times that of the general population. The VA's planning models recognize that its aging patient population demands more care. More than 4.49 million or 16.4 percent of the veteran population reported suffering from "heart trouble" in the 1993 National Survey of Veterans. More than 998,000 or 3.6 percent of the veteran population are stroke survivors. As the veteran population ages, the number of veterans afflicted by heart disease and stroke will increase substantially.

HOW YOU CAN MAKE A DIFFERENCE

The American Heart Association, dedicated to reducing death and disability from heart attack, stroke and other cardiovascular diseases, commends this Committee's support of the Department of Veterans Affairs' Medical and Prosthetic Research program. But, we are alarmed that for the second year in a row the President's budget flat funds this vital program. Enactment of this budget would severely jeopardize ongoing studies and adversely impact planned innovative research. If a no-growth budget is enacted, VA would be negatively impacted by about $12 million in expected medical research inflation, which will erode out-year costs for previously approved research and new research opportunities.

We recommend an fiscal year 2001 appropriation of at least $386 million for the VA Medical and Prosthetic Research program. Our recommendation, consistent with that of the Friends of VA Medical Care and Health Research and the Independent Budget, will allow maintenance of fiscal year 2000 initiatives and implementation of new initiatives for fiscal year 2001. We challenge our government to significantly increase funds for heart and stroke research through the VA Medical and Prosthetic

Research program. We strongly urge the VA to establish heart and stroke research centers to advance the battle against heart attack, stroke and other cardiovascular diseases—America's No. 1 killer and a leading cause of disability. Our government's response to this challenge will help define the health and well being of citizens in the next century.

INSUFFICIENT VA RESOURCES DEVOTED TO HEART AND STROKE RESEARCH

The VA Medical and Prosthetic Research program plays an important role in heart and stroke research and deserves the strong support of Congress. In fiscal year 1999, VA support for research on heart disease was $23.7 million (a 13 percent increase from fiscal year 1998), accounting for 7.4 percent of the fiscal year 1999 VA's Medical and Prosthetic Research budget. In fiscal year 1999, VA-supported stroke research represented $4.2 million or 1.3 percent of the VA's Medical and Prosthetic Research budget. We are concerned that insufficient money is being devoted to America's No. 1 killer—heart disease—and our No. 3 killer—stroke. Both are major causes of permanent disability. Besides its own program, VA investigators spent another $40.5 million on heart research and $7.8 million on stroke research from outside sources.

VA HEART AND STROKE RESEARCH BENEFITS ALL AMERICANS

The mission of the VA Medical and Prosthetic Research program is to "discover knowledge and create innovations to advance the health and care of veterans and the nation." While the primary purpose of the VA health care system is the provision of quality health care to eligible veterans, VA-supported research contributes to the quality of care by bringing talented and dedicated physicians into the VA system. Discoveries from VA-supported research benefit veterans, science and the world's health. VA cardiovascular research represents an integral part of the overall scientific effort in this field. VA researchers include many nationally recognized, distinguished scientists and several Nobel Laureates. The VA had supported Ferid Murad, M.D., 1998 Nobel Prize winner for research demonstrating the role of nitric oxide in regulating blood pressure. Several VA investigators have been acknowledged for their work in cardiovascular research. For example, American Heart Association volunteer Gerald F. DiBona, M.D. was awarded the prestigious VA Middleton Award in 1995 for internationally recognized research on kidney and cardiovascular diseases.

The Medical Research component of the VA Medical and Prosthetic Research program supports basic and clinical research, mainly investigator-initiated peer reviewed studies. It provides funds for support of VA-based faculty members (M.D.s or Ph.D.s) at various stages in their careers, multicenter cooperative studies—a large portion of which are cardiovascular studies—and research equipment. AIso, VA investigators provide core faculty support at major medical schools affiliated with VA institutions. The presence of a VA research program aids the VA. This small but internationally recognized, highly competitive research program in fiscal year 2000 supports 2,157 investigators at 132 VA-supported facilities.

VA cardiovascular research is largely clinical. The VA is a major contributor to clinical research, playing a unique role because of its ability to immediately translate research findings into practice.

VA-supported research has produced landmark results and revolutionized treatment in the cardiovascular area. You and your family have benefited directly from VA heart and stroke research. Several cutting-edge examples follow.

—*Heart Attack Treatment*.—VA's Quality Enhancement Initiative Ischemic Heart Disease Study found that VA medical facilities provide equivalent or superior treatment for heart attack patients when compared with the private sector. Quality measures for these veterans surpass those in the private sector in the use of aspirin, beta blockers, ACE inhibitors and in the evasion of calcium channel blockers. Similar findings were found for angioplasty patients.

—*Heart Bypass Surgery*.—In 1997, an estimated 607,000 heart bypass surgery procedures were performed on 366,000 patients in this nation at an average cost of $44,820 per procedure in 1995. Generally, one year after surgery, 10 to 15 percent of the vein grafts used in these procedures become blocked. VA research has found that reducing the temperature of the solution used to harvest the vein grafts may stop heart arteries from becoming narrowed with atherosclerosis. The study also found that while a daily aspirin stops artery vein blockage for a year after surgery, long-term survival depends on the extent of underlying disease before the procedure and the length of time of the procedure. In a landmark study, VA researchers found that heart medication works just

as effectively as heart artery bypass surgery for certain groups of patients with narrowed arteries.

—*Gene Therapy And Heart Failure*.—About 4.6 million Americans suffer from congestive heart failure, a major cause of hospitalization for Americans age 65 and older. VA researchers have found in animal studies that inserting a gene in heart cells affected by heart failure started an active increase in the chemical that triggers the cells to beat more strongly. Additional research in this area could provide a new lease on life for millions of Americans. Also, VA scientists, using gene therapy in animals, increased the number of blood vessels that transport oxygen to the heart.

—*Stroke Risk Reduction*.—About 9 percent of older Americans suffer from the most common type of an irregular heart beat, atrial fibrillation, a stroke risk factor. Research has shown that low doses of the blood thinner warfarin can lower stroke risk by about 80 percent in sufferers of atrial fibrillation.

—*Stroke Survivor Improvements*.—Stroke is a leading cause of permanent disability in this country and the No. 3 killer. VA studies have produced therapies to enhance quality of life for survivors. VA researchers have created a software program to assess and treat the stroke-related speech disorder aphasia. Also, they have shown that strenuous exercise can benefit stroke survivors who are paralyzed on one side of their body, and have developed a rehabilitation procedure to restore arm movement. Researchers have identified seven pathways associated with motor recovery from stroke, allowing more precise predictions about functional recovery of stroke survivors.

—*Aspirin and Angina*.—About 6.3 million Americans suffer from angina (chest pain) due to insufficient blood supply to the heart. In another landmark study, VA research found that aspirin cuts deaths and heart attacks by 50 percent in patients suffering from unstable angina.

—*Angioplasty Benefits*.—In 1997, an estimated 447,000 angioplasty procedures were performed in this nation to restore blood flow to the heart by widening narrowed arteries. VA research was the first to evaluate angioplasty. Results showed that after undergoing angioplasty, patients suffered less pain and can exercise longer than those taking only medication. Another study found clot-busting drugs had similar results to angioplasty for heart attack survivors at savings of $3,000 per patient. Annually more than 150,000 people are candidates for clot-busting drugs, according to VA.

—*Heart Failure*.—The growing number of sufferers from heart failure has earned this disease the title of "the new epidemic." A major VA study, in conjunction with the National Heart, Lung, and Blood Institute and Intercardia Corporation, showed unexpectedly that the beta blocker bucindolol did not reduce death from heart failure. This finding will lead to further research to decide which patients are most likely to benefit from beta-blocker drugs and the need to examine gender, racial and ethnic differences in cardiovascular disease studies. This was the first study to include large numbers of African Americans and patients with advanced heart failure.

—*Heart Failure Drugs*.—About 4.6 million Americans suffer from congestive heart failure, the often-disabling inability of the heart to pump sufficient blood throughout the body. A VA study showed that heart medications can enhance the heart's pumping ability and keep sufferers of congestive heart failure alive. These study results have revolutionized heart failure treatment.

—*High Blood Pressure*.—An estimated 50 million Americans have high blood pressure, the leading stroke risk factor and a major cause of heart attack. VA research found that like private sector statistics, physicians increase anti-hypertensive medicine in only 25 percent of patients with higher blood pressure and that the patients who had their blood pressure monitored were poorly controlled. More aggressive management of these patients will reduce the number of heart attacks and strokes, America's No.1 and No. 3 killers, respectively. An inexpensive computerized reminder system helps doctors manage patients and cut costs by reducing use of calcium channel blockers.

—*Cholesterol*.—About 40 million American adults have high blood cholesterol levels (240 mg/dL), a major heart attack and stroke risk factor. An estimated 11 million veterans are at increased risk of heart disease due to high cholesterol levels, according to the VA. A groundbreaking VA-supported clinical trial found that daily use of the drug gemfibrozil, raises HDL by 6 percent, reduces coronary heart disease risk by 22 percent with reductions in heart attack, stroke, transient ischemic attack and carotid endarterectomy for heart disease sufferers with low levels of both "good" and "bad" cholesterol. Results could mean cost savings because gemfibrozil is cheaper than statin drugs. This is the first study to show significant reduction in risk of major cardiovascular diseases by raising

HDL, the "good" cholesterol, lowering triglycerides and not changing LDL, the "bad" cholesterol. VA research showed the effectiveness of cholesterol screening, when broken down into HDL and LDL for adults-even those older than age 65. Another study found that the addition of soy protein to a low-fat diet substantially lowers cholesterol in those with moderately high cholesterol levels.

—*Irregular Heart Beat Treatment*.—An estimated 1 million Americans suffer from atrial fibrillation, the most common irregular heartbeat, which causes more than 75,000 strokes a year. VA researchers found that the drug digoxin was not effective in controlling heart rate. But, they discovered when digoxin was combined with a beta-blocker, patients achieved almost perfect heart rate. These results will enhance treatment for atrial fibrillation and reduce stroke risk.

—*Wheelchair Aerobic Fitness Trainer*.—This trainer is an alternative to drug-induced stress testing for cardiorespiratory fitness and coronary artery disease in people with lower limb disabilities.

—*Psychoeducational Program for Stroke Family Caregivers*.—Most stroke survivors are helped in the recovery process by a family caregiver, usually the spouse. A pilot study testing a program to reduce physical and psychological demands on family caregivers found this intervention reduced depression and caregiver burden and better prepared them for their role. Preliminary results found that a telephone intervention may be as helpful as the in-home program. Execution of this program could have vital results for family caregivers of 4.4 million American stroke survivors.

—*Non-Q-Wave Heart Attack*.—Of the estimated 1.1 million Americans who will suffer a heart attack this year, about 600,000 will experience non-Q-wave—EKG classification—version. VA research showed that noninvasive treatment of non-Q-wave heart attack patients saves money, an estimated $20 billion a year, and is just as effective or in some cases better than invasive procedures such as heart bypass surgery or angioplasty. Higher death rates were associated with invasive procedures. Results could change treatment for sufferers of this type of mild heart attack. An economic study is examining cost-effectiveness on initial stay and follow-up care and estimating impact of adoption of these recommendations on American health care costs and pioneer VA cost determination methods.

—*Heart Attack Treatment*.—VA researchers found aspirin is as effective as aspirin and the blood thinner, Coumadin, for heart attack victims. Aspirin is cheaper and does not need dose regulation.

HEART AND STROKE RESEARCH CHALLENGES AND OPPORUTNITIES FOR VA

Research advances outlined above and other progress have been made possible by congressional support of the VA Medical and Prosthetic Research program. Thanks to research, heart attack or stroke no longer necessarily mean instant death. Now that more people are surviving, heart attack and stroke can mean permanent disability, costly medical care, and loss of productivity and quality of life. Challenges and research opportunities to advance the battle against heart disease and stroke abound. Examples of on going VA research are highlighted below.

—*Heart Failure Studies*.—A VA study is comparing effects of three anti-clotting therapies (aspirin, warfarin or clopidogrel) in heart failure patients. Another study is creating a large DNA bank of sufferers to examine genetic basis of heart failure. A third study, the first large scale, international, randomized clinical trial, is evaluating effects of digitalis, a 200-year old treatment in preventing heart failure deaths, a major cause of hospitalization of Americans age 65 and older. Another study is determining if sleep apena oxygen treatment will improve survival and quality of life of veterans with heart failure and reduce hospitalizations. It will identify sleep apnea risk factors in those with stable heart failure. Heart failure represented more than 22,000 VA hospitalizations in 1990 at a cost of about $100 million. Results will improve treatment of heart failure that affects 4.6 million Americans.

—*Inflamed Arteries*.—Many heart attacks and strokes are the end result of atherosclerosis, the disease process that causes obstructed blood vessels. VA-supported research has shown that inflammation may cause atherosclerosis or hardening of the arteries. Scientists have identified large numbers of a certain receptor on inflammatory cells in heart blood vessels. If researchers can create a way to block that receptor, progression of atherosclerosis might be prevented.

—*Heart Attack Research*.—An estimated 1.1 million Americans suffer a heart attack each year. VA research is assessing cost-effective ways to diagnose and treat suspected heart attack without costly invasive procedures, including a computer analysis of the heart's electrical signals during exercise and a new

scoring system in a treadmill test. Another study is examining long-term outcome and risk factors for heart attack sufferers, for those who have heart attack during surgery and for those who have heart bypass surgery. Findings could save money, improve health care and reduce surgical procedures.

—*Warfarin and Aspirin Study*.—Heart attack is America's single largest killer. A VA-sponsored study is analyzing effects of the blood thinner warfarin plus aspirin versus aspirin alone in reducing deaths from heart attacks. If results confirm the hypothesis, VA estimates that 20,000 lives could be saved.

—*Angioplasty*.—Heart disease affects about 20 million Americans. Heart disease is the No. 1 killer in the United States. In the first of its kind study, COURAGE, VA is comparing the effectiveness of angioplasty with medical therapy versus aggressive medical therapy alone in patients with heart disease. The results of this study could revolutionize treatment for heart disease. In 1997 an estimated 447,000 angioplasty procedures were performed in the United States to restore blood flow to the heart by widening narrowed arteries. The average cost of angioplasty in 1995 was $20,370.

—*Atherosclerosis and Iron Research*.—Atherosclerosis is a major heart attack and stroke risk factor. VA research is evaluating the concept that too much iron in the blood stream contributes to atherosclerosis. Research results could revolutionize the treatment of heart attack and stroke.

—*Stroke Research*.—Stroke strikes about 600,000 Americans each year; many survivors are disabled. Researchers found restricting use of limbs unaffected by stroke can help patients recover use of limbs affected by stroke more quickly and fully. Progress in deciphering language of the brain's motor cortex, the section that helps control muscle movement, could lead to new technology that may reconnect damaged areas or communication pathways of the brain and may restore lost function after a stroke. Another study found the "Western diet" compared with the "Asian diet" may guard against dementia in Japanese-American stroke survivors. Now scientists are examining nutrients in the "Western diet." Researchers are studying genetic susceptibility to carotid atherosclerosis, a major cause of stroke. Scientists are examining quality of care at VA hospitals, because of findings that blacks suffer more severe strokes than whites and that blacks are less likely to receive imaging tests or carotid endarterectomy, surgery to remove buildup of atherosclerotic plaque in the main artery to the brain, located in neck, to prevent stroke.

The number of VA research applications has grown slightly over the last five years, but funding cuts and/or inflationary increases severely restrict support for approved applications. For the programs, which were reviewed for fiscal year 1999 funding, more than 30 percent of approved applications were funded. Ten years ago, 40 to 50 percent of the approved applications were funded.

Through fiscal year 2000, total dollars appropriated for the Department of Veterans Affairs Medical and Prosthetic Research program have increased $128 million since 1985 at an approximate annual rate of about 3 percent. But, there has been a decrease in terms of constant "1985 dollars" of $14.7 million. The Medical Research programs highlighted below are of interest to the American Heart Association.

—*Investigator-Initiated Studies*.—During fiscal year 2000 this program will constitute 71 percent of the Medical and Prosthetic Research appropriated budget. Under the President's 2001 budget, this program would be straight-lined from the fiscal year 2000 appropriated level. These investigators comprise the core of all VA research and provide the preceptorship for career development awardees.

—*Cooperative Studies*.—In fiscal year 2000 this program supports 38 clinical trials. The VA offers a unique opportunity for cooperative studies due to close linkage among hospitals. These studies provide a mechanism by which research on the effectiveness of diagnostic or therapeutic techniques can achieve statistically significant results by pooling data on patients from a number of VA hospitals. The Cooperative Studies Evaluation Committee evaluates proposals developed by teams of VA clinicians and biostatisticians. The VA under this mechanism has supported many landmark clinical trials in the cardiovascular field (e.g., studies in high blood pressure treatment and coronary artery bypass surgery). Under the President's fiscal year 2001 budget, this program would be level funded.

—*Career Development Awards*.—Applications for these awards are reviewed both locally and by the VA Central Office. This program experienced a decrease in the number of awards by 58 percent from a high in 1991 of 212 awards to a low of 88 awards in fiscal year 1997. In response to the Research Realignment Advisory Committee's suggestion to rejuvenate this program, a renewed empha-

sis began in fiscal year 1997 for the VA's Medical Research Service, Health Services Research and Development Service and, for the first time, Rehabilitation Research and Development Service. This will result in an anticipated 176 Career Development Awards in fiscal year 2000.

ACTION NEEDED

Today's investment in medical research will lead to future returns. Returns include continued decreases in death rates from heart attack, stroke and other cardiovascular diseases, reduced federal outlays for hospital and long-term care, a well-trained cadre of medical researchers and a healthier society.

Consistent with the Friends of VA Medical Care and Health Research and the Independent Budget, we recommend an fiscal year 2001 appropriation of at least $386 million for the VA Medical and Prosthetic Research program. This appropriation will allow maintenance of fiscal year 2000 initiatives and implementation of new initiatives, including continuation of research momentum in heart disease and stroke and maintenance of VA's vital role in this field. We urge VA to establish heart and stroke centers to fight cardiovascular diseases-America's No. 1 killer and a major cause of disability.

PREPARED STATEMENT OF THE AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES, AFL–CIO

Mr. Chairman and Ranking Member my name Bobby L. Harnage, Sr. I am the National President of the American Federation of Government Employees (AFGE), which represents 600,000 federal workers across the nation. First, I want to thank you and your colleagues for increasing the DVA budget for fiscal year 2000 by $1.7 billion. This increase in veterans medical care for fiscal year 2000 is key to ensuring that this unique health care system is prepared to meet veterans' needs after four years of downsizing staff, eliminating beds, dwindling supplies, cuts in medical services, and increasing costs. Without the increase, veterans' health care would have been at risk.

Our comments on fiscal year 2001 funding are based on two principles. DVA's budget will not be sound until it is linked to medical inflation and full staffing levels to both address inpatient and outpatient needs of veterans. Second, the DVA must be accountable for using its funds to provide veterans with the highest quality of care and benefits.

For fiscal year 2001 the Administration is seeking a $1.4 billion increase over last year's pre-recission level. AFGE remains concerned that Administration's request is still insufficient in light of the years of budget cuts, increasing health care costs, and the mounting demand to provide veterans with specialized treatment and long-term care.

The fiscal year 2001 Independent Budget, co-authored by four leading veterans service organizations (AMVETS, Disabled American Veterans, Paralyzed Veterans of America, and Veterans of Foreign Wars) and endorsed by AFGE's National Veterans Affairs Council, calls for a DVA medical care budget of $21.2 billion and additional staff. AFGE supports this request, which is a $1.9 million increase over the fiscal year 2000 funding level.

But even this higher request does not allow the DVA to ensure that expenditures for veterans' health care keep pace medical inflation. For the general population age 65 and older health care expenditures are projected to increase by 4.4 percent each year from 1996 through 2005, according to HHS's Agency for Healthcare Research and Quality. The veteran population the DVA serves is sicker and more likely to suffer from mental illness and substance abuse than the general older population. Yet, from fiscal year 1995 to fiscal year 1996 DVA's budget increased by 2.49 percent, from fiscal year 1996 to fiscal year 1997 the increase was 2.7 percent, from fiscal year 1997 to fiscal year 1998 the increase was 4.7 percent but then dropped to a 0.53 percent increase for fiscal year 1999. Overall, the DVA budget has averaged 4.2 percent increases since fiscal year 1996.

We urge this subcommittee to recognize that it is unrealistic and unacceptable to expect the DVA to extract "management efficiencies" to pay for an expected 20–22 percent increase over 1998 prescription drugs costs. How will the DVA ever be able to fill staffing holes that have been created through years of attrition and to ensure adequate prescriptions, medical supplies and equipment if the DVA budget is not linked to medical inflation?

The Administration has proposed in its budget to send veterans to non-DVA health care providers who will not be held accountable for the same standards of care as the DVA. Currently, neither DVA's Medical Inspector nor DVA's Inspector

General, Office of Healthcare Inspections, studies the medical errors that may be occurring at facilities in which DVA contracts for veterans medical care.

Unlike the DVA's in-house operations, DVA's contractors are not required to inform veterans or their families of medical errors or adverse events that occur in a contractor facility. Nor are veterans entitled to additional compensation or disability benefits when they suffer medical malpractice or negligence at the hands of contractors with the DVA. Thus, when the DVA sends veteran to a non-DVA facility, that health care provider is held less accountable.

Contractors are frequently paid on a per-patient basis, regardless of the costs for that patient. Under such arrangements, using fewer diagnostic tests, and providing less costly research-based treatments maximizes profits. DVA is accountable to Congress for providing veterans with care based upon their individual needs and the professional, independent assessment of DVA employees. Most contractors for DVA are accountable to their stockholders.

In addition to the quality of care concerns raised by the use of contractors to provide veterans with care, there is also the issue of cost to the taxpayer. DVA rarely, if ever, performs an adequate cost comparison of whether it is more efficient to use contractors or DVA employees. Shouldn't Congress know the real cost of contract care for veterans?

AFGE urges the Subcommittee to require DVA to conduct cost comparisons before contracting out current or new services as well as regular audits of the quality of care provided by contractors.

AFGE supports DVA's budget proposal to increase patient safety initiatives. By rigorously identifying, analyzing and correcting systemic patient safety problems, DVA is more accountable to veterans and Congress.

We believe it is unwise that DVA's budget proposal is silent on the most direct means of improving patient safety and health care outcomes—staff-to-patient ratios. Under DVA's proposed fiscal year 2001 scenario, staff will be down by 29,652 from DVA's 1994 staffing levels, although DVA projects it will be treating more veterans and those veterans will be frailer and sicker.

DVA needs to adopt regulations establishing minimum, specific, and numerical licensed nurse-to-patient ratios for all hospital units and Community Based Outpatient Clinics as presently exist for intensive care units and operating rooms. And then hold medical directors accountable for meeting these staffing levels. DVA also should prohibit DVA hospitals and contractors from requiring unlicensed, minimally trained personnel to perform nursing functions such as invasive procedures, patient assessment, patient education, or administration of medication.

Adequate numbers of well-trained staff are essential to manage workloads, prevent potentially harmful delays in care, avert medical errors, and improve services. Inadequate staff-to-patient ratios can have serious consequences for patients. For example, research shows patients at hospitals with fewer nurses per patient have a greater incidence of urinary tract infections, pneumonia, blood clots, pulmonary congestion and other lung-related problems following major surgery.

DVA's current analysis of reported medical errors does not call for an analysis of whether the staff-to-patient ratio was adequate, whether staff involved were on overtime, or whether staff involved were performing additional duties beyond their regular duties because of staffing shortages.

Nearly 20 percent of the reported medical errors at DVA facilities involved a patient falling. AFGE believes that nursing staff-to-patient ratios may be a factor in these falls. One-third of the reported medical errors were a suicide or attempted suicide, yet DVA's protocols on investigating these events do not require an examination of how the extensive elimination of inpatient psychiatric beds and the concurrent reduction in staff affected those veterans in need of mental health services.

AFGE urges this Subcommittee to hold DVA accountable for maintaining adequate staffing levels. We urge report language to direct DVA to study the relationships between adverse incidents (including "close call" medical errors) and the reductions in clinical and supporting staff levels, as well as elimination of inpatient beds for mental health services.

The DVA requests $63.5 million to support pay raises for nurses under an alternative pay system for these federal employees. This request assumes that the nurses' pay increase in fiscal year 2001 will correspond to the same percentage increase for General Schedule (GS) employees. In the past, however, the DVA has denied nurses the full percentage pay increase provided to GS employees, despite the DVA's budgetary intentions. We urge this Subcommittee to hold the DVA accountable, and require that nurses receive—at minimum—the same percentage GS increase paid to other DVA employees.

AFGE urges this Subcommittee to correct the deficiencies in the DVA's proposed fiscal year 2001 budget. The budget for veterans' health care must—at a min-

imum—support the existing staff levels, maintain appropriate patient-to-staff ratios by back-filling positions that have been lost by six years of staffing reductions. The DVA must be accountable for using its funds to provide veterans with the highest quality of care and benefits, and to fairly compensate its health care workers. When contractors provide veterans' health care they should not be held to lower standards or be monitored less rigorously than DVA.

DEPARTMENT OF HOUSING AND URBAN AFFAIRS (HUD)

The proposed fiscal year 2001 budget for the Department of Housing and Urban Development is very ambitious. It seeks to increase funding over fiscal year 2000 by more than $6 billion dollars.

AFGE believes that HUD must be held accountable for using its funds efficiently and effectively. We are troubled that HUD's budget request is inflated by its reliance on outside contractors to do core mission-related work. HUD cannot demonstrate that its proposed use of contractors instead of federal employees saves money.

In its September 30, 1999, audit (99–PH–163–0002), the HUD Inspector General provided a follow-up review of HUD contracting. During the 20-month period reviewed, HUD obligated $1.3 billion. The IG found that: "[e]ven though the reinvented HUD has placed greater reliance on outside contractors to conduct its business, it has not conducted an OMB Circular A–76 cost comparison in the past 11 years . . . to determine whether procurement decisions were cost-effective. In our opinion these multi-billion dollar spending decisions are exactly the type of decisions that were envisioned in OMB Circular A–76 and prudent management would encourage careful analysis of such matters."

Similar concerns about whether HUD appropriately considered the costs of contracting can be found in HUD IG Audit Report #97–PH–163–0001, and the National Academy of Public Administration report "Renewing HUD, A Long-Term Agenda for Effective Performance."

In fiscal year 1999 this Subcommittee required HUD to explain its failure to conduct public-private competitions, as required under OMB Circular A–76. The Subcommittee found HUD's response troubling because HUD relied on form over substance to claim that it was following the guidance of OMB Circular A–76 even as it avoided conducting a single public-private cost study prior to contracting out.

HUD cannot demonstrate that its proposed use of contractors instead of federal employees delivers better service.

HUD procured management and marketing services for HUD owned single family properties (commonly referred to as the M&M Contracts). Federal employees had previously performed this work. This work involves the oversight of a significant a widely dispersed portfolio of HUD owned properties that must be sold. HUD was forced to terminate seven of the sixteen M&M Contracts awarded during the first year of the program. One contractor, Intown, held these seven contracts. Despite unprecedented support from HUD staff during the start-up period, Intown failed miserably and went into bankruptcy leaving subcontractors and HUD in the lurch. The contract failure also hurt the communities in which these HUD homes are located.

The Intown debacle stemmed from HUD's push to contract out M&M without every conducting a public-private competition and without considering developing the internal capacity to bring the work back in-house work should the contractor fail to perform.

In fiscal year 1999 this Subcommittee required HUD to explain its failure to conduct public-private competitions, as required under OMB Circular A–76. The Subcommittee found HUD's response troubling because HUD relied on form over substance to claim that it was following the guidance of OMB Circular A–76 even as it avoided conducting a single public-private cost study prior to contracting out.

Because HUD cannot demonstrate that its current use of contractors instead of federal employees saves money and delivers better service we urge the Subcommittee to require that HUD demonstrate cost savings on current contracts before being allowed to expending millions more on additional contractor services. We urge the Subcommittee to require HUD to conduct a study to consider bring work back in-house where contractors fail to perform or have been implicated in waste, abuse or fraudulent contract charges or overcharges.

Thank you for considering our views. This concludes my statement.

PREPARED STATEMENT OF THE AIR FORCE SERGEANTS ASSOCIATION

Mr. Chairman and distinguished committee members, thank you for this opportunity to present what the Air Force Sergeants Association (AFSA) and those it rep-

resents believe should be among your fiscal year 2001 budget priorities for the Department of Veterans Affairs (VA). This committee has always served in a singularly nonpartisan way to act as the conscience of this nation in ensuring that our veterans are viewed as a vital national resource rather than a financial burden. Our decisions in this regard as a nation should not be based on the bottom line, but on what is right. Building on the great successes you achieved last year, we ask you to continue the momentum in addressing the needs of those who serve.

As each of you have often indicated, we owe our servicemen and women an immeasurable debt of gratitude. In order to preserve the day-to-day peace and prosperity of the citizens of this nation, those who serve in the military turn their mortal beings over to the dictates of their country—prepared to die, if need be. Their terms of service are always arduous, and the job they do for all of us is fantastic. We owe them—perhaps more than any other segment of our society. This committee among all components of our national leadership holds the key to protecting and honoring these warriors who are driven by no more than selflessly contributing to the preservation of freedom and liberty.

Today, I wish to comment on some of the concerns we receive from our members through phone calls and during field visits. AFSA and its 150,000 members represent those who are currently serving, those veterans who have reached retirement, and those who have simply separated.

AFSA maintains that if this nation is indeed grateful for having been protected, it owes those who have served to safeguard it. After all, these men and women faced unlimited liability, forming a covenant with the nation to sacrifice their lives, if necessary, to protect its interests. We owe them a solid educational program to return them to the status of a productive citizen, we owe them short- and long-term health care to deal with any physical condition that resulted from the period during which they served their nation, we owe them other programs such as home loans to enhance their lives. For those veterans who reached military retirement, we must ensure that they too have the full range of veterans benefits.

We ask that this committee, at a minimum, meet the Administration's fiscal year 2001 Budget proposals which include increases in funding for the Veterans' Health, Benefits, and Cemetery Administrations, and identical baseline funding for medical research. The president's request is a good starting point for this committee. We must all remember that the attention we extend toward those who have served will have a significant impact on those who are considering military service. As such, funding in all of these programs should be a national priority.

This nation's response for service should be based on certain principles that this association urges these committees to use as a guide during your deliberations. These imperatives provide foundation upon which we feel the decisions of these committees should be based.

GUIDING PRINCIPLES

1. Provide a Solid Transition Back into Society.—Clearly, a debt is owed those who serve. The United States of America owes its veterans dignified, transitional, recovery assistance . . . not based on rank or status, but simply because they served in the most lethal of professions. In effect, they signed their physical and spiritual beings over to this nation.

2. Always Remember that Most Veterans are Enlisted.—Any decisions on veterans' benefits must factor in a realization that most veterans are enlisted veterans. These veterans served with lower pay, generally reentered the civilian populace with nontransferrable military skills, probably had relatively little civilian education, and served in skills that are less marketable. Certainly, "a vet is a vet," but enlisted veterans bring a different economic equation to the table; we must factor in that situation as we make important decisions about veterans' futures.

3. Decide Based on Right—Not Cost.—This nation's commitment cannot waver simply because of the large number of veterans. Congress and (in turn) the VA must never make determinations simply because "the money is just not there" or because there are now "to many" veterans. Our national will and the correlative response should be based on doing what is right.

4. Remember Reservists.—Our enlisted guardsmen and reservists are full-time players. They are part of the total force. Any differences between reserve component members and the full-time force, in terms of VA programs or availability of services, need to be systematically erased. Their commitment is no less real. Their subjection to unlimited liability is just as absolute. Their love of country is just as intense. We urge you to act to bring our guardsmen and reservists in as full beneficiaries.

5. Honestly Commit to Treat the Maladies of War.—It is important that the commitment of our troops to combat or high-risk situations also involves an absolute

commitment to care for any malady that may have resulted from that service. Many veterans call and write to this association about our government's denial, waffling, then reluctant recognition of illnesses caused by conditions during the Persian Gulf conflict. Many point out that our government agencies responsible to our veterans acted in the same manner following the Vietnam Conflict in reference to Agent Orange. We ask you to reinforce a commitment to unconditional care after service.

This statement will focus on three general areas: education, health care, and general issues that we hope you will consider as you deliberate the budget and policies that should be a part of the program offered to our veterans for the upcoming fiscal year.

EDUCATION

As the Congressional Commission on Servicemembers and Veterans Transition Assistance (established by Public Law 104–275), also known as the "Principi Commission," concluded in December 1998, education is the key to successful transition. While this incredibly comprehensive report summarized the changes needed to make the Montgomery G.I. Bill a viable tool for readjustment by providing a benefit that will pay for the cost of education, Congress and the Administration had done little to implement the historic findings of the commission. As such, action is overdue to show the members serving this nation that it cares for the incredible sacrifices they make.

Make the Benefit a Legitimate, Valuable One.—If this nation is going to have a program that sincerely intends to satisfy the purpose of the program, it certainly should mirror civilian industry by providing a real educational program and not a token, non-sufficient one. At a minimum, the value of the Montgomery G.I. Bill must be increased to reflect the costs of education.

Over the years, this fine program has lessened in value due to inflation. This benefit requires a member to pay $1,200 to buy into the program. In return, by current rates, the member receives 36 months of education at $536 per month. That comes to a total value of a little over $19,000 for the initial buy in cost. However, the national average for 36 months at an average four-year public college for a non-resident student for tuition, books, and fees is very close to $36,000. This average annual cost figure is derived from a non-partisan annual index reported by "The College Board." This benchmark, updated annually, is $8774 for academic year 1999–2000. Stipends based on the proposed benchmark would have been $945 per month in 1998–1999, $975 for academic year 1999–00, and project to be about $1000 per month in 2000–2001. It is time that we realize that the educational benefit is an important transitional tool that should be tied to actual educational costs. It does have an impact on recruiting, retention and readjustment. It is time for the military institutions of this nation provide a fair, useful educational benefit for those who serve. As such, we strongly urge you to pass legislation to benchmark the value of the Montgomery G.I. Bill to the annual College Board report so that it will be, from now on, tied to a visible, legitimate cost of 36 months of education. This would be fair to those who serve and, as a side note, make our annual efforts quite a bit easier.

Provide an Open Window For All Into the Montgomery G.I. Bill.—Those who entered the service after December 31, 1976, and before July 1, 1985, were offered the Veterans Educational Assistance Program (VEAP). Within that program, the military member contributes up to $2,700 which the government matches with up to $5,400. However, there are approximately 55,000 members who came into the service between 1977 and 1985 who chose not to participate in VEAP because it was considered a relatively poor benefit in relation to the actual cost of classes. These G.I.s are now retiring (20-plus years of service) without any educational benefit.

So too, since 1985, the Montgomery G.I. Bill has been offered to new airmen entering the Air Force. If an airman chooses to participate, this program requires a $1,200 payroll deduction, $100 during each of the member's first 12 months of service. For that $1,200, the member receives an educational benefit of $536 per month for 36 months—clearly a much more valuable benefit than VEAP. However, the airman's enrollment decision must be made at basic military training; it is a one-time, irrevocable decision. At that critical juncture, many choose not to participate because they can't afford to do so due to their already-relatively low pay. During the pressure of basic training (and at a time of lowest pay) is not the appropriate time that airmen, many of whom have families to support, should have to make such an important decision. We should let them elect to participate at any time during their careers.

An open window to enroll in the MGIB at this time would correct a clear injustice that many of this nation's veterans continue to suffer. The 1997 VA Authorization

Act created an open window for some VEAP participants to convert to the MGIB. However, 110,000 (DOD-wide) VEAP participants were excluded from converting to the MGIB because government counselors gave them faulty information. We have received dozens of phone calls and letters decrying the fact that these military members followed the rules; but were excluded because the government decided to change the rules at the last minute. Under VEAP, there is a 2-for-1 matching. If you have money in your VEAP account, it is non-interest bearing. Accordingly, education counselors in all services advised VEAP participants not to put money into their VEAP accounts until they were ready to use the benefit. Unfortunately, when the 1997 VEAP-MGIB window opened, the law allowed only those with money currently in their accounts to convert to MGIB. Tens of thousands of VEAP participants were excluded from the conversion because they followed the guidance of government counselors. In basic fairness, short of a universal open window, we need to reopen the opportunity for those who were illegitimately excluded from the earlier opportunity to convert to the MGIB.

The veterans' educational benefit can be an excellent recruiting tool and a valuable transitional device. The Montgomery G.I. Bill has succumbed to educational inflation—it is simply no longer a strong educational incentive. It has been reported that this lack of value has led to where less than 50 percent of veterans enrolled in the MGIB even bother to use it. As such, we urge these committees to re-establish the educational benefit a legitimate, valuable program. Take the recommendations of the Principi Commission to heart to guide your decisions. Finally, we strongly urge an open window for all current non-MGIB enrolles an opportunity to get into the program.

MEDICAL CARE

Without question, the health care system administered by the veterans administration impacts, in one way or another, those who served. As we look at the VA medical system as it applies to our members, I wish to briefly touch on some issues that have been reflected in the many phone calls we have received from the field. Of course, we tend to hear most loudly and frequently from those who are not happy with the adjudication of their claims or the treatment they have received. I am not going to go into isolated problems, because anecdotal information is just that. Rather, I want to briefly touch, instead, on some specific health-related situations that need to be addressed.

Provide a Full Continuum of Care.—There must be mandated access to VA health care for all veterans. All honorably discharged veterans must have the full continuum of care mandated by law. In minds of many, the VA health care system is there to serve only paupers. This image and the underlying reality must be upgraded. The VA system must act as a health care system for all veterans. In this sense, AFSA believes there needs to be a full national commitment toward expanded health care opportunities for veterans. Funding must be identified to provide this range of care.

Support VA Subvention.—VA-Medicare subvention is very promising, and we offer full support for this effort. The VA has an infra-structural network to handle this, so we anticipate the effort will be successful. Under this plan, Medicare would reimburse the VA for care it provides to non-disabled Medicare-eligible veterans at VA medical facilities. Just as in the case of DOD Medicare subvention, this is an opportunity to ensure that those who served are not lumped in with all those who never chose to do so. Because of the Medicare reimbursement, cost to the government should be minimal.

Wisely Support VA–DOD Sharing Arrangements.—The enlisted force is pleased with the possibility of VA–DOD sharing arrangements involving network inclusion in the DOD health care program, and especially, the practice of consolidating physicals at the time of separation. This decision represents a good, common sense approach that should eliminate problems of inconsistency, save time, and take care of our veterans in a more timely manner. In that sense, these initiatives may actually save funding dollars. Our only caveat would be that DOD beneficiary participation in VA facilities must never endanger the scope or availability of care for our traditional VA patients, nor should any VA–DOD sharing arrangement jeopardize access and/or treatment of DOD health services beneficiaries.

Focus on the Welfare of the Veteran.—While the VA's drive to save money by reducing its expenses is commendable, we caution the VA that these reductions must not be the overriding target. The end goal must be full care and treatment of veterans. Participation in other avenues of revenue generation tends to cause focus on a bottom line. The only bottom line in this system should be the welfare of the veteran.

Provide Long-Term Care.—The VA must be fully funded to provide for long-term care including nursing home care; care for chronically mentally ill veterans; and home care aid, support and services. While landmark legislation passed last year took us a great deal closer to this end, it will only come about if adequate, earmarked, consistent funding is identified.

Care for Women Veterans.—Another dimension of this nation's veterans' demographics that has significantly increased in recent years is the number of women who serve. The VA must be funded to provide the resources and legal authority to care for women to include obstetric services and after-birth care for the mother and child. Funding needs to be earmarked to make this important health care a reality.

GENERAL ISSUES

A Written Guarantee.—Many veterans are frustrated and disappointed because promises that were made during their careers are simply not being kept. They feel that the covenant between the nation and the veteran was one-sided, with honor on the side of the veteran. We urge this committee to support a guarantee in writing of benefits to which veterans are legally entitled by virtue of their service. To refuse to do so is to say that this nation is not prepared to be honest with its servicemembers.

Speedier Processing.—We applaud the Veterans Administration for progress made toward the reduction in the time required to process claims and adjudicate appeals. We urge you to do all that you can to push the VA to continue this progress and to fund initiatives that will make the system more provide- and user-friendly.

Homeless Vets.—Because of the ravages of war, the unique nature of military service, and numerous other reasons, many veterans are homeless. We ask these committees to remember that many of these people paid a tremendous price in serving their nation. It is important that we expend an extra effort to assist this group of citizens; we must be concerned with their welfare.

Legitimate, Sincere Veterans Preference.—Over the last few years you have made great strides toward making "Veterans' Preference" a reality. We urge these committees to continue to support and fund any improvement that will put "teeth" into such programs so that those who have served have a leg up when transitioning back into the civilian workforce.

Eliminate Home Loan Fees.—The best way to attract new veterans to use this valuable benefit is to eliminate fees and make the program as attractive a possible. However, if other home loan programs are made available, liberal qualification criteria and the "no down payment" feature should be maintained for all sources.

Make the Reserve Home Loan Permanent.—For our reserve component members, the Selected Reserve Home Loan Program was extended once again last year. Congress should permanently extend this program. Those members who serve in the guard and reserve deserve full, year-round benefits. The concept of "weekend warriors" is certainly an unfair, inaccurate misnomer. Our nation owes them a great deal, the least of which is provision of a full benefits package for their service. Continuing to revisit this issue and approve it for limited time periods sends a very poor signal to these patriots. We ask this committee to endorse making the program permanent.

Mr. Chairman, in conclusion, I thank you for this opportunity to present the views of the Air Force enlisted community. AFSA believes that the work of this committee is among the most important done on the Hill. Your job is not only to protect and reward those who served; it is to demonstrate to those currently serving and who someday will serve that this nation is committed to honor those who give a portion of their lives to their nation. After all, the nation's peace and current prosperity is in no small measure due to their noble efforts. On behalf of all AFSA members, we appreciate your efforts and, as always, are ready to support you in matters of mutual concern.

PREPARED STATEMENT OF THE FLEET RESERVE ASSOCIATION

INTRODUCTION

Mr. Chairman. The membership is pleased the Fleet Reserve Association (FRA) has been invited by this distinguished Subcommittee to present its request for funding the Department of Veterans Affairs (DVA) for fiscal year 2001. On behalf of nearly 153,000 shipmates, I extend gratitude for the concern and active interest generated by you, Mr. Chairman, and the Members of the Subcommittee in providing funds for the protection, improvement, and enhancement of programs available to our Nation's veterans.

FRA is the oldest and largest professional military enlisted association exclusively serving and representing men and women of the three Sea Services. It continues to seek protection and equity for those who serve in or have retired from the Navy, Marine Corps, and Coast Guard, plus those veterans requesting assistance from FRA. The Association has been active over the past 75 years in pursuing Congressional and the respective Administration's support for enlisted quality of life and veterans' programs for Sea Services' personnel.

DEPARTMENT OF VETERANS AFFAIRS FISCAL YEAR 2001 BUDGET

FRA seeks adequate funding for the DVA. The budget requests approximately $48 billion or an increase of $1.7 billion over last year's funding. The Association is pleased to see the Administration take a positive step toward funding the DVA, but we believe there are some areas that need more attention. For example, FRA is very disappointed to learn the budget mentions nothing about needed improvements in the GI Bill. In addition, the Medical Care portion of the budget appears not to be sufficient to provide care for the Nation's veterans as outlined in the Department's mission.

FRA is most appreciative of the Subcommittee's oversight of the Department's budget and its efforts to ensure adequate appropriations for veterans programs. We ask that you continue those efforts as you hear the concerns addressed in this statement. The Association believes its concern with the VA Medical Care budget is well founded and offers a comparison, as it did last year. This year, the Association has selected several agencies whose programs may be compared to Medical Care provided to the Nation's veterans. It is noted that for comparability, VA Medical Care has not received its fair share of the Federal budget over the years.

A comparison of funding for VA Medical Care appropriations indicates DVA comes up woefully short from fiscal year 1996 through fiscal year 1999 when compared to PHS and NIH appropriations. Using VA Medical Care figures through fiscal year 2000 ($19,247), there has been an increase of 14.4 percent since fiscal year 1996, still 5 percent less than the nearest Federal agency based on the previous fiscal year.

In its belief that more needs to be done, FRA lists the following programs that should be properly funded or expanded in the DVA for fiscal year 2001. The Association urges the adoption of its recommendations and their eventual funding to assure America's veterans they will be fully recognized and, if applicable, compensated for the sacrifices made in service to the Nation and its citizens.

FRA RECOMMENDATIONS IN BRIEF

FRA's membership has an average age of 68 years, all veterans of as many as three wars, mostly retired and from the Sea Services. On their behalf, the following recommendations are submitted for consideration:

—Appropriate funds to expand health care for all veterans.
—Provide funds for the construction and leasing of additional nursing and long-term care facilities.
—Provide additional funding to improve educational programs and provide voluntary open enrollment in GI Bill for all current and past VEAP participants.
—Support the repeal of the statute requiring the repayment of separation pay if the service member re-enlists in the Reserve component, subsequently is entitled to retired pay, or becomes entitled to VA compensation.
—Provide support for the adoption of concurrent receipt of military retired pay and veterans' compensation without loss to either.
—Deny funding to DVA for the enforcement of Civil Court orders directing the division of veterans' service-connected disability compensation and military retired pay. Also, encourage the adoption of laws that will repeal this practice.
—Appropriate sufficient funds for the expansion of cemetery facilities (including Arlington National Cemetery) to provide adequate burial spaces.

VETERANS HEALTH ADMINISTRATION

Expand access to veterans health care

FRA seeks adequate funds for the Veterans Health Administration (VHA). Eligibility Reform and the Uniform Benefits Package are an appealing concept, offering our veterans a comprehensive health care plan that provides the care they need. What is bothersome, however, is the annual enrollment requirement and not knowing what priority levels will be enrolled each year. FRA believes that VHA medical treatment and care centers should be open to all veterans' regardless of their ability to pay. The Association agrees there must be a system granting priority access for

certain veterans; i.e.—service-connected disabled at 30 percent or more; however, all veterans rated 20 percent or less, or non-rated, should be granted access on an equal basis—first come, first served. The latter group would include non-disabled military retired veterans who were promised free medical care for life and received that care previously, but do not now have access to military treatment facilities (MTFs). These military retirees are forced to seek treatment from other than MTF sources.

Through the Base Closure and Realignment Acts (BRAC), Congress voted to close MTFs, many of which were located in areas where retirees resided for the purpose of obtaining the benefits promised to them and their families. It is only fair that Congress should now allow them higher priority access to VA health care and direct the Department of Defense to reimburse the VA for care tendered. Frankly, FRA further believes that extending equal access to veterans as suggested above will improve quality and the administration of care in veterans' health care programs. Lastly, until the military initiates or provides sufficient access to some type of health care program for "displaced" (Base Closure) military retirees, VA treatment facilities should be open for their use at no cost to the retiree. Therefore, FRA does not advocate the adoption of TRICARE in VA medical facilities for military retirees.

MEDICARE SUBVENTION

FRA recommends that a demonstration project be authorized with funds appropriated for the VA to test the feasibility of establishing Medicare Subvention programs within its health care facilities.

FRA is concerned with dwindling access to health care. In its statement on the proposed VA Medicare Subvention Demonstration Program in July of last year, FRA stated this concern: "its membership, with an average age of 68 years, will be compelled to seek health care in non-military treatment facilities, even though the vast majority are military retirees." When these retirees made their decision to retire in a certain area of our country, they did so with the thought of being close to a military installation or MTF. As stated earlier, many of those installations have closed and MTFs are no longer available.

FRA believes it would be cost-effective for the VHA and the Health Care Financing Administration (HCFA) to allow Medicare-eligible veterans to voluntarily utilize VHA facilities for their health care. Medicare Subvention is integral to fulfilling the promise of caring for veterans who served the Nation in war and peace.

HCFA would reimburse the VA for care provided Medicare-eligible veterans and at the same time collect from third party insurers providing veterans Medigap or other commercial healthcare policies. Instead of Medicare dollars going to a commercial entity, authorizing Medicare Subvention for the VA would then become one of the major building blocks to encourage DVA to continue and expand modernization of its health care program.

Medical Care Collections Fund (MCCF)

The MCCF program has achieved mixed results. Past performance suggests the program failed to reach its collection estimates while the costs to conduct the program continue to increase. Recent trends indicate that VA's collections have decreased over the past few years. VA collected $523 million in 1995, $495 million in 1996, $450 million in 1997, and $442 million in 1998. The MCCF balance as of September 30, 1999 was approximately $396 million, sustaining this trend.

FRA firmly believes the MCCF program was never intended as a substitute for adequate appropriations, but rather as a program to compliment or supplement appropriations. The Association recommends that to aid in providing additional funding for the VHA health care system, VA should continue to collect reimbursements through the MCCF program. However, VHA should be authorized to retain receipts from this program and these should not be included in the VA budget.

TOBACCO-RELATED ILLNESSES

FRA recommends that DVA be authorized and funds appropriated for the pursuit of monetary reprisal from the tobacco industry for the purpose of establishing care and treatment for tobacco-related illnesses attributed to smoking while veterans were active members of the Nation's Uniformed Services.

In 1998, Congress changed the law prohibiting service-connection for disabilities related to smoking. Arguments have been made that smoking is a matter of personal choice and veterans should not be compensated for an illness that resulted from their choice. Counter arguments have been made that military life created an environment and culture that encouraged smoking.

Many veterans began using tobacco during their military service, it was a way of life. Information detailing the health risks associated with tobacco use and nicotine addiction was nonexistent. There are some who believe the Armed Services facilitated smoking by including cigarettes in meal rations and provided cigarettes at discounted prices in military exchanges. FRA recommends Congress revisit and repeal its 1998 decision.

NURSING HOMES, LONG TERM CARE, AND OTHER HEALTH CARE PROGRAMS

World War II and Korean veterans are in their 60s and above, as are some Viet Nam veterans, and require a greater level of long-term care. This year, the number of veterans 65 or older will peak at 9.3 million, and by 2010 approximately 8.5 million veterans will be 65 or older—which equates to 42 percent of the entire veteran population. No one can argue against the fact that as our veterans are aging, more and more of them will become dependent upon the VA to provide the necessary care in nursing homes, domiciles, state home facilities, and its underused hospital beds. The Nation can ill afford to wait for out-year funds before it expands nursing or long-term care.

FRA is grateful to Congress for the passing of Public Law 106–117, the Millennium Health Care Act. This statute makes great strides to achieve the long-term care our veterans deserve. One concern of the Association, however, is the proposed method by which VA plans to fully fund the Millennium Health Care Act.

After reviewing the DVA budget request, FRA disagrees with the methodology used in collecting $350 million for the Millennium Act and then transferring that money over to the Treasury. VA's rationale for this is, in doing so, it will allow more room for discretionary VA spending under the current caps set in the Balanced Budget Law. The Association views this as a slight of hand rather than a business practice and firmly believes any money collected from veterans for veterans health care should stay with VHA.

FRA is opposed to consolidating the newly created Health Services Improvement Fund and the Extended Care Revolving Fund with the Medical Care Collections Fund (MCCF). The new funds were created as part of the Millennium Health Care Act with the intent of improving various health services to veterans. The Association believes there was never any intent on the part of Congress to allow the commingling of these funds and asks that you keep them separate. This will allow for better tracking of collections, but more importantly, it will ensure money collected for veterans long-term care will be spent for future veteran long-term care—just what Congress intended.

MEDICAL AND PROSTHETIC RESEARCH

Dollar for dollar, VA is widely recognized for its effective research program. FRA continues to support adequate funding for medical research and for the needs of the disabled veteran. The value of both programs within the veterans' community cannot be overstated. The need is there.

VETERANS BENEFITS ADMINISTRATION

Education

Montgomery GI Bill (GI Bill)

As in the past, the GI Bill is one of the major enticements for enlisting in the United States Armed Forces. FRA believes that improvements to the GI Bill are necessary in order to continue to attract new recruits per congressionally mandated recruitment levels each year, and to retain those who are currently serving but not enrolled in the program

The Association believes those veterans who participated in the Veterans Education Assistance Program (VEAP) and were not able to convert to the current GI Bill should be provided the opportunity to enroll. Whether they withdrew voluntarily because VEAP failed to offer satisfactory benefits, or as a result of misinformation from senior officials, now is the time to right this wrong.

Presently, the GI Bill provides a monthly stipend of $536 for nine months out of the year or $19,296 over a four year period. According to VA calculations, the current average annual cost of college tuition, fees, and board is $981 monthly or $8,829 for the typical nine month academic year. Over a four year period the current allowance pays just over half the average cost for tuition, fees, and board. Estimates for the 2000–2001 academic year amount to $1000 a month or $36,000 over four years.

FRA believes Congress should increase the GI Bill allowance to an amount at least equal to the average cost of pursuing a four year college education and open

the enrollment door for those former VEAP participants. The Association continues to subscribe to the belief once offered by the Treasury Department that veterans who take advantage of their GI bill will eventually return more money to the U.S. Treasury for every dollar spent by the Federal government for their education.

TERMINATION OF THE $1,200 CONTRIBUTION TO THE GI BILL

FRA opposes the termination of the $1,200 contribution (payroll deduction) to the GI Bill. The Association believes the contribution adds an incentive for the service member to further his or her educational pursuits because of this investment. However, in lieu of $100 per month for 12 months, the Association recommends $50 monthly deductions over a 24 month period. At the end of the two year period, he or she would be eligible to begin receipt of GI Bill benefits. Also recommended is the reimbursement of contributions with interest if, at the end of the enlistment or period of honorable service, the member chooses not to participate in the GI Bill. Further, if the member fails to complete the term of enlistment or service, or is in receipt of less than an honorable separation, no refund of contributions would be authorized.

TRANSFER OF EDUCATION BENEFITS TO SPOUSES AND CHILDREN

FRA opposes the transfer of education benefits to spouses and children of those who have served less than a 20 year career in the Armed Forces. The Association believes if this were allowed, the cost of providing education benefits to veterans' family members will soar to new heights. It's difficult to forget the years 1975 and 1976 when the high cost of funding the Vietnam GI Bill caused the major veterans' organizations and the incumbent Administration to call for its demise. Many Vietnam veterans subsequently lost out on education benefits.

EDUCATION BENEFITS FOR ACTIVE DUTY PERSONNEL

FRA again suggests an amendment to provide stipends to active duty personnel pursuing education under the GI Bill. If the service member has two or more years of honorable active service and the inclination to enroll in a course of education after regular duty hours, he or she should be authorized a partial stipend depending on the number of hours completed each month. Today, many service members must seek employment after hours in order to provide every-day comforts for the family. If the member receives a stipend for enhancing his or her level of education instead of "moonlighting," then we create a win-win situation where veterans can obtain the best education for which they quality. FRA recommends appropriations to fund such a program.

PAY AND COMPENSATION

Separation pays

To ease service member's transition, Congress agreed to provide certain separation payments for those with six or more years of active service, but less than 20. On departure from their uniformed service, they were encouraged to join the Reserve or National Guard. However, few knew or were aware that if they eventually retired and received retirement pay, their separation pay, special separation benefit (SSB), or voluntary separation incentive (VSI) payment would have to be repaid to the Federal government. The same applies to those who are later awarded service-connected disability payments from the VA.

FRA is totally opposed to the requirement of repayment. Under current law the service member who is released from active duty and does not qualify for veterans disability payments, or is not accepted by the National Guard or Reserve, never has to repay any portion of separation pay. If, however, qualified for either, it's time for pay-back. FRA has difficulty understanding why the individual willing to further serve the Nation in uniform or is awarded service-connected disability compensation should have to repay the Federal government for that privilege. The Association recommends the repeal or the necessary technical language to amend the applicable provisions in Chapters 51 and 53, 38 USC, to terminate the requirement to repay the subject benefits. (Also requires an amendment to 1704(h)(2), 10 USC.)

CONCURRENT RECEIPT

FRA continues its advocacy of concurrent receipt of military retired pay and veterans' service-connected disability payments without loss to either.

Late in the nineteenth century, Congress was looking at military retired pay and disability pensions and found the administration of the programs in shambles. There were instances of persons receiving military disability pensions while still on

active duty. In an effort to correct the problem, Congress inserted language in the fiscal year 1892 appropriations legislation prohibiting an individual from receiving both military retired pay and a disability pension. Currently, the prohibition is described in 38 USC 5304(a)(1) and reads as follows:

—§ 5304(a)(1) Except to the extent that retirement pay is waived under other provisions of law, not more than one award of pension, compensation, emergency officers', regular, or reserve retirement pay, or initial award of naval pension granted after July 13, 1943, shall be made concurrently to any person based on such person's own service or concurrently to any person based on the service of any other person.

Most retired military veterans abhor the knowledge their Federal civilian counterparts can receive their government pension concurrently with veterans' compensation for service-connected disabilities. It is difficult to comprehend the fact that retired military personnel, unauthorized to draw military retired pay concurrently with veterans' compensation, may gain employment in the Federal establishment, switch his or her military retired pay to a Federal employee pension, and be eligible for concurrent receipt of both the Federal pension and veterans' compensation.

The argument of "same period of service to the Nation cannot be compensated twice" follows. If this were true, why is a Federal employee, a member of the National Guard or Reserve, paid by the military for the annual 14 day training period and, at the same time, in receipt of payment for his or her Federal employment, plus a credit for both civilian and military retirement purposes? This is, without a doubt, dual payment for the same period of service. (Note: This is in no way to be construed as advocating a change to the procedure of rewarding Guard and Reserve personnel who also are Federal employees.) FRA has long believed the statutory dollar-for-dollar offset in military retired pay for any amount of VA disability compensation is an unfair penalty, particularly for severely disabled retirees whose disabilities have precluded any post-service working career. The Association is grateful for the passing of Special Compensation for Severely Disabled Retirees last October and views this as a good first step. We have recently learned there are many in Congress who believe that inclusion of section 658 of the National Defense Authorization Act for Fiscal year 2000, now Public Law 106–65, fixed the concurrent receipt issue. That is far from the truth—they are two separate issues and concurrent receipt remains high on the Association's agenda.

FRA remains committed to enactment of full concurrent receipt for all disabled retirees. Retired and disability pays are totally different. Retired pay is a force management tool designed to attract and retain large numbers of high quality service members to pursue a military career. It is offered in recognition that members are forced to start a new civilian career in their forties and face a substantial income loss when leaving the military. Disability pay, on the other hand, helps to compensate members for injuries or disease incurred in the line of duty. The monetary benefits compensate for pain, suffering, or injury, plus the member's reduced earning potential.

FRA recommends the distinguished members of this Subcommittee actively support and encourage the repeal of 38 USC 5304(a)(1).

COURT-ORDERED DIVISION OF VETERANS COMPENSATION/RETIRED PAY

The intent of service-connected disability payments is to financially assist a veteran whose disability may restrict his or her physical or mental capacity to earn a greater income from employment. FRA believes this payment is exclusively that of the veteran and should not be a concern in the States' Civil Courts. If a Civil Court finds the veteran must contribute financially to the support of his or her family, let the court set the amount allowing the veteran to choose the method of contribution. If the veteran chooses to make payments from the VA compensation award, then so be it. The Federal government should not play a collector's role.

FRA urges this Subcommittee's support for considering the inequitable treatment in Federal law, not only of veterans described immediately above, but of veterans earning military retired pay for long and faithful service to the Nation in the uniformed services. The Association recommends the adoption of stronger language offsetting the provisions in 42 USC, now permitting Federal enforcement of State court-ordered divisions of veterans' compensation payments.

COMPENSATION AND PENSION PROGRAM

Disability compensation claims processing

FRA believes the processing time for a disability compensation claim continues to be excessive. Veterans Benefits Administration (VBA) reports the average processing time for initial claims is 160 days. If that claim is appealed to the Board of

Veterans Appeals (BVA), as many are, the average time for a decision is 700 plus days. Speed is an issue. More important is accuracy, a component of processing ignored for years and the cause of many delays in finalizing a claim. The Association is grateful for recent budget and personnel increases, however, more employees and money are not the answer if they are not properly trained. VBA's own Statistical Accuracy Report program (STAR) shows an error rate of thirty to forty percent in their Regional Office's (RO's). Manager's of those RO's attribute inadequate staffing and lack of training as the primary reason for the high error rate.

NATIONAL CEMETERY ADMINISTRATION

Cemetery systems

In 1862, President Lincoln signed into law legislation authorizing establishment of national cemeteries "—for the soldiers who shall die in the service of the country." Fourteen cemeteries were established in that year making the beginning of what has become the National Cemetery Administration (NCA). The NCA has undergone many changes since its inception. Currently, the administration maintains over 13,000 acres of developed and undeveloped land containing over 2.2 million grave sites. That equates to 117 cemeteries throughout 41 states, the District of Columbia, and Puerto Rico. The NCA anticipates the opening of two new cemeteries in spring of 2000.

One quarter of the nation's 26 million veterans alive today are over the age of 65. A rapidly aging veteran population coupled with the death rate of World War II veterans creates resource challenges within the NCA. Current estimates suggest about 572,000 veterans will die in 2000 which is a rate of approximately 1,567 per day. Future estimates suggest that number will increase to 620,000 annually by 2008, or an average of 1,700 per day. The NCA estimates its annual interment rate for fiscal year 2000 is expected to reach over 80,000.

The NCA has been doing much to meet resource challenges and the demand for burial spaces for aging veterans. It could do more, but without the necessary funds, the system will never meet the demand. FRA urges increased funding, fenced so the NCA has exclusive use for the purchase of land, preparation, construction and operation of new cemeteries, the maintenance of existing cemeteries, and the expansion of grants to States to construct and operate their own cemeteries. FRA strongly supports the NCA's appropriation request of $110 million and an increase of 47 FTE for fiscal year 2001.

OTHER RECOMMENDATIONS FOR CONSIDERATION

FRA submits the following comments for the Subcommittee's consideration. They come from recommendations related to the goals of the Association as resolved by the FRA membership in convention in August 1999.

TRICARE AND DOD

FRA does not support HMO-style health care for military personnel. The current dissatisfaction with DOD's TRICARE system is adequate reason to oppose any recommendation to expand the program within the VA Medical Services.

ARLINGTON NATIONAL CEMETERY

FRA endorses the Bill, H.R. 70, that will establish new eligibility requirements for burial in the Arlington National Cemetery. The House passed this Bill on a 428–2 vote March 23, 1999 and it was placed on the Senate Calendar June 28, 1999. If this goes to conference, FRA recommends the Senate defer to the House proposal.

Additionally, FRA supports the appropriation of funds for the expansion of the cemetery to include portions of the property now housing the Arlington Navy Annex and any available property adjacent to the cemetery grounds.

TRANSITION ASSISTANCE PROGRAM

FRA welcomes any recommendation to improve and adequately fund the Military's Transition Assistance Program. The Association has in the past few years opposed the Department of Defense's attempts to reduce this critical program that assists service members in returning to civilian life when their periods of active service in the Armed Forces are concluding.

UNIFORMED SERVICES FORMER SPOUSES PROTECTION ACT (USFSPA)

In 1998, Chairman Stump held hearings on the USFSPA. It was clear the original law made its way through Congress under suspicious circumstances and has become

a one-way weapon used by many former spouses, and their attorneys, to financially bleed their military spouses of outrageous sums.

Late last year, FRA sponsored a voluntary survey and received 327 responses from both male and female members of the Armed Forces, mostly active duty and retired enlisted personnel in pay grades E5 through E9. The Association sent a letter, along with a summary of survey responses, to most members of Congress requesting their support for having a bad law revisited. The current statute is offensive. It is not equitable to all it serves, and it is discriminating to many.

FRA strongly endorses Messrs. Stump and Norwood's proposal, H.R. 72, and urges all members of this Subcommittee to support its proposed amendments to the USFSPA. The Association believes USFSPA should be as fair to the military retiree veteran as it is for his or her spouse.

CONCLUSION

Mr. Chairman, allow me to again express the sincere appreciation of the Association's membership for all the Subcommittee has done for our Nation's veterans over these many years. FRA is grateful for the opportunity to address the distinguished members of this panel on the issues so important to its membership. Granted, not all veterans' issues are cited in this statement, however, the Subcommittee does have the Association's support for the improvement or enhancement of any veterans programs not addressed herein.

PREPARED STATEMENT OF THE AMERICAN LEGION

Mr. Chairman and Members of the Subcommittee: The American Legion appreciates the opportunity to comment on the Administration's fiscal year 2001 budget proposal for the Department of Veterans Affairs (VA). The main challenge to veterans' advocates in this new century is to protect and improve the hard won and well deserved benefits that veterans and their survivors have and to continue to redress the problems that remain within all three VA administrations. To that end, the President's fiscal year 2001 budget for VA sets forth a good beginning.

The President's fiscal year 2001 budget for VA programs and services includes a budget authority of $47.6 billion, an increase of $1.7 billion over the enacted fiscal year 2000 level. The medical care budget of $20.9 billion includes a $1.35 billion appropriations increase; entitlement spending of $24.6 billion reflects an overall $200 million increase; and other discretionary spending totaling $2.1 billion increases by $100 million. VA is projecting Medical Care Cost Fund revenues of $600 million to achieve a total medical care budget of $20.9 billion.

Last September, I appeared before a Joint Session of the Congressional Committees on Veterans' Affairs to present The American Legion's fiscal year 2001 budget recommendations for VA. My recommendations and the President's fiscal year 2001 budget compare as follows:

FISCAL YEAR 2001 VA BUDGET

[In thousands of dollars]

	President's fiscal year 2001 request	American Legion recommendation
Medical Care (appropriations)	$20,300,000	$20,500,000
Medical and Prosthetics Research	321,000	375,000
Major Construction	62,000	200,000
Minor Construction	162,000	200,000
Grants for State Extended Care	60,000	[1] 110,000
National Cemetery Administration	110,000	110,000
State Grants Cemetery Program	25,000	25,000
Veterans Benefits Administration General Operating Expenses (GOE)	1,000,000	960,000

[1] The American Legion recommendation for the Grants Program for State Extended Care Facilities has subsequently been revised to $150 million.

VETERANS HEALTH ADMINISTRATION (VHA)

The American Legion believes the President's fiscal year 2001 medical care budget is a responsible budget, but still falls short of necessary funding support. The medical care budget proposes an increase of $1.355 billion, to be targeted as follows:

—Expend $548 million to fully meet the costs of the Veterans Millennium Health Care and Benefits Act, Public Law 106–117, regarding emergency care, extended care services, and specialized mental health services,
—Continue an aggressive response to Hepatitis C by increasing funding by $145 million over fiscal year 2000 projections,
—Enhance Patient Safety Management and Training by adding 190 full-time employees (FTE) for oversight safety issues (to a level of $137 million for patient safety and 484 FTE system-wide),
—Access and Service Improvements with $400 million and 2,200 FTE realigned to meet the goal of veterans receiving a primary care appointment within 30 days, obtaining a specialty clinic appointment within 30 days, and being seen within 20 minutes of scheduled appointments ($200 million expenditure over the fiscal year 2000 level), and
—Open 63 new outpatient clinics and treat 100,000 more veterans than in fiscal year 2000.

These necessary initiatives account for nearly $1 billion of the total projected fiscal year 2001 medical care funding increase. The additional $355 million increase has to absorb the projected cost for current service adjustments, pharmaceutical increases, prosthetics services, dental services, and all other programs. In all honesty, $355 million is not sufficient to cover all other fixed expenses. VHA is projecting new management efficiencies of $360 million just to stay within the budget targets. This is the portion of the Administration's fiscal year 2001 VHA budget that is fraught with danger.

Therefore, The American Legion recommends at a minimum, a fiscal year 2001 appropriations increase of $1.5 billion for VA health care. With a slight increase in MCCF revenues, above the current year level, and with realistic efficiency enhancements, VHA will be in a much better position to meet its fiscal year 2001 obligations.

MEDICAL AND PROSTHETIC RESEARCH

The Administration is proposing a fiscal year 2001 straight-line budget for medical and prosthetics research. Dollar for dollar, VA is widely recognized for conducting a very effective research program. VA devotes 75 percent of its research funding to direct clinical investigations and 25 percent to bioscience. Patient-centered research comprises one of every two dollars spent on VA research. While more responsibility is delegated to VA research through its Rehabilitation Research Centers of Excellence, the Geriatric Research, Evaluation and Clinical Centers, and the recently established Mental Health Research Centers of Excellence, it is negligent to propose a flat line budget for fiscal year 2001.

Two years ago, the Administration committed to a goal of doubling VA's medical and prosthetics research budget over a five-year period. The research budget was then $282 million. VA's research appropriation requires a significant funding increase over several years to accomplish its mission and goals. It is essential to know what research programs and initiatives the Administration would propose reducing, in light of its failure to acknowledge a necessary funding increase over the current services level. With a flat-line budget for fiscal year 2001, VA will be seriously challenged in attracting and retaining competent research professionals.

VA research cannot maintain its current efforts or plan its future activities when its budget is so uncertain from year to year. The American Legion previously recommended that VA research funding be set at three percent of the Department's medical care appropriation. Currently, the research budget represents 1.5 percent of health care funding. Most major corporations devote at least three percent of their budget to research and development and there is no reason why VA cannot do the same. It's a struggle convincing the Department to devote more of its funding to research and development, aside from seeking these resources from Congress.

VA recently expanded its Rehabilitation Research Centers from three to nine. This program, including its efforts in spinal cord, stroke, rehabilitation, multiple sclerosis, and low vision research will be significantly derailed under the fiscal year 2001 budget. VA has not funded one cooperative research project this year due to its current inadequate research appropriation. Cooperative research programs affected include diabetes, heart disease and Parkinson's disease.

The Quality Enhancement Research Initiative (QUERI) will be further reduced under the fiscal year 2001 budget. This program started with ten separate areas of research investigation and has already been reduced to eight topics due to a shortage of funding. It is projected that the program will be further reduced to five topic areas under the fiscal year 2001 budget. QUERI is an exciting program that not

only accomplishes patient related research but also translates that research into direct patient care.

Department facilities are also seriously short of research space. With over 3,000 underutilized buildings across the system, minor construction improvements are critically necessary. VA estimates that infrastructure improvements at the 25 neediest sites will cost approximately $25 million.

Nearly 75 percent of VA's medical investigators are physicians. These doctors will not remain with VA as the research program continues to grow smaller. While VA's research appropriation represents about one-third of its overall research budget, it is an important one-third. It is up to Congress to correct this glaring funding deficiency in VA's fiscal year 2001 budget and for the future.

MEDICAL CONSTRUCTION AND INFRASTRUCTURE SUPPORT

The Administration proposes $62 million for major construction projects for fiscal year 2001 and $162 million for minor construction. The initial VA proposal to the Office of Management and Budget was $260 million for major construction and $222 million for minor construction.

The American Legion believes both major and minor construction proposals are impracticable to the prevailing needs. VHA would greatly benefit from developing a five-year strategic plan for priority construction requirements—and making this plan available to all interested parties to generate maximum support. There is no consistency to what construction project's OMB supports. The infrastructure needs of VHA that receive OMB approval are totally budget driven, rather than needs driven. The American Legion supports the seismic correction project for VAMC Palo Alto, CA. However, seismic projects are also necessary for VAMCs Long Beach and San Diego, CA. There is also a compelling need to renovate various buildings at the Brecksville Division of VAMC Cleveland, OH and to construct a new spinal cord injury unit at VAMC Augusta, GA.

For minor construction, the proposed $162 million budget will not begin to address the system's many requirements. Various VA facilities require significant clinical and ambulatory care renovations to accommodate the recent increases in primary care.

The longer VA has to defer receiving the necessary funds to maintain state-of-the-art medical care facilities and address critical patient safety issues, the harder it becomes to catch up. Once again, there is ample evidence of a penny-wise, pound-foolish construction philosophy.

GRANTS FOR CONSTRUCTION OF STATE EXTENDED CARE FACILITIES

The recently enacted Millennium Act requires VA to provide long-term nursing care to veterans rated 70 percent service-connected or greater. It also requires VA to provide long-term nursing care to all other veterans for service-related disabilities and to those willing to make a copayment to offset the cost of care. Further, the bill requires VA to provide veterans greater access to alternative community-based long-term care programs. These long-term care provisions will place greater demand on VA and on the State Home Program for many years to come.

It makes economic sense that VA look to the state homes to help fully implement the provisions of the Millennium Act. VA spends an average $255 per day to care for each of their long-term nursing care residents and pays private-sector contract nursing homes an average per diem of $149 per contract veteran. The national average daily cost of caring for a State Veterans Home nursing care resident is approximately $140. VA reimburses State Veterans Homes a per diem of only $40 per nursing care resident.

The $60 million proposed for fiscal year 2001 would not come close to meeting the program's full requirements. The State of Texas alone requires $58 million in matching VA grants to fully fund all seven newly approved state veterans' homes. Throughout the Nation, 2,500 new long-term care beds (including domiciliary beds) are waiting for matching VA grants. The bottomline is that the State Veterans' Home Grants Program needs $150 million in fiscal year 2001 to cover every single new state home that has applied for matching funds. Afterwards, the program's annual requirements will be based on new applications.

NATIONAL CEMETERY ADMINISTRATION (NCA)

I requested a funding level of $110 million for the NCA in fiscal year 2001 during his September 1999 testimony. The American Legion is pleased that the Administration recognizes the budgetary needs of NCA with its request of $110 million for fiscal year 2001.

The workload and budget requirements of NCA will continue to grow over the next 15–20 years. The death rate of World War II veterans will peak in 2008, but the annual death rate of veterans will not return to the 1995 level until 2020.

I am pleased the construction of four new national cemeteries is included in the fiscal year 2001 for advanced planning of new national cemeteries in Miami, FL; Detroit, MI; Atlanta, GA; and Sacramento, CA. The American Legion believes a new national cemetery in the vicinity of Pittsburgh, Pennsylvania is also a high priority. Advanced planning funds should be included in the fiscal year 2001 budget for a new national cemetery in Pittsburgh, PA.

STATE CEMETERY GRANTS PROGRAM

The American Legion supports the Administration's request of $25 million for the State Cemetery Grants program in fiscal year 2001.

VETERANS BENEFITS ADMINISTRATION (VBA)

The Administration's budget for the VBA for fiscal year 2001 provides $24.6 billion for the payment of statutory benefits to eligible veterans, their dependents, and survivors. The budget reflects higher average benefit payments, certain legislative proposals, and a proposed 2.5 percent cost-of-living-adjustment for fiscal year 2001.

Discretionary funding for VBA would be increased to $1 billion, which represents an increase of $139 million over the fiscal year 2000 appropriation. This will provide for an increase in staffing of 287 full time employees (FTE) over the current authorized staffing level and 577 FTE over the staffing level for fiscal year 1999. The additional personnel resources, in conjunction with VBA's ongoing efforts to reengineer their business processes and other initiatives, will improve the quality and timeliness of service provided to veterans and their families.

The performance and service improvements set forth in the fiscal year 2001 budget reflects the broad goals of VBA's strategic management plan and the expected progress toward meeting the specific performance measures established for this budget cycle. The funding and staffing levels proposed for fiscal year 2001 will permit VBA to continue the implementation of its strategic plan initiatives and be proactive in preparing for the large scale retirement among experienced adjudicators and other personnel expected in the next several years.

In response to considerable criticism from its veteran clientele, stakeholders, and Congress, VBA has, within the last several years, begun implementing an ambitious plan to improve its overall operations. This includes the development of a broad spectrum of administrative, programmatic, and technological changes, which over time, should result in dramatic improvements in both the level and quality of service provided by VBA offices. The American Legion is strongly supportive of VBA's efforts to address the core problems affecting the claims adjudication and appeals process. However, we recognize this is a long-term process and, as such, will require continued budgetary support in fiscal year 2001 and beyond in order to ensure success.

BOARD OF VETERANS APPEALS (BVA)

The American Legion requests $45.9 million for fiscal year 2001 for the operations of BVA. Staffing at BVA is to increase by 24 FTE for a total of 500 FTE. The additional resources will enable the BVA to continue improving its productivity and further reduce its response time. This will also provide continued support to the joint BVA/VBA efforts to resolve as many appeals as possible before they come to the BVA and to reduce the overall appeal response time.

SUMMARY

The Administration's fiscal year 2001 budget for VA is a responsible request and provides room for further improvement. The proposal allows both VHA and VBA to continue building on their current reform efforts. It would be completely inconsistent for the Administration to support the recent Veterans' Millennium Health Care Act and not provide sufficient funding to support the bill's various mandates. The increase in VBA's General Operating Expense is greatly needed and represents an important step towards meeting its Business Reengineering Plan objectives.

The VA health care system must continue its efforts to generate new non-appropriated funding sources. Each year, VHA's current services budget requires nearly a $1 billion increase just to maintain its programs and services. The American Legion believes its GI Bill of Health is a realistic proposal and would generate a substantial amount of new annual revenues for VHA. It is time to enact on an incremental basis the various provisions of the GI Bill of Health that would generate new

revenues for VHA. This includes providing VA health care to certain veterans' dependents, to military retirees and their eligible dependents, and to active duty personnel and their dependents.

The American Legion supports the Administration's fiscal year 2001 budget for NCA and the State Cemetery Grants Program. Both of these programs are proposed to receive needed increases. These budgets reflect a growing national commitment to recognize the service and sacrifices of all veterans.

The American Legion believes the Administration's fiscal year 2001 budget seriously undermines VA's medical and prosthetics research programs, the major and minor construction programs, and the State Extended Care Grants Program. The American Legion respectfully requests this Subcommittee to thoroughly review the Administration's budget for these programs in light of their reasonable budget requirements and their overall contribution to supporting VA's mission.

Mr. Chairman, that concludes this statement.

PREPARED STATEMENT OF THE SANTA ROSA MEMORIAL HOSPITAL

Mr. Chairman, and Members of the Subcommittee, thank you for the opportunity to submit testimony to the hearing record regarding the proposed Northern California Telemedicine Network. This network will consist of a hub located at Santa Rosa Memorial Hospital in Santa Rosa, California and will serve over 11 hospitals, health centers and clinics in Sonoma, Napa, Mendocino, and Humbolt counties.

Santa Rosa Memorial Hospital is moving aggressively to build a permanent telemedicine infrastructure to expand health care services, as well as education and prevention programs into these currently underserved areas. The core of this initiative will be located at the Santa Rosa Memorial Hospital Emergency Department that will serve as the "hub," for this regional telemedicine network, providing access to primary, specialty and trauma care services.

The Northern California Telemedicine Network will work with other institutions to develop twelve "spoke" sites throughout northern California during the initial years of the project including:

—St. Joseph's Hospital, Eureka, California
—Redwood Memorial Hospital, Fortuna, California
—Mendocino Coast District Hospital
—Petaluma Valley Hospital
—Rohnert Park Healthcare Center
—Redwood Coast Medical Services
—Anderson Valley Health Clinic
—Mendocino Coast Clinics
—Potter valley Community Health Center
—Long Valley Health and Dental Center
—Mendocino Community Health Clinic

The growth of this network will enable a telemedicine program to achieve maximum cost effectiveness by serving multiple spoke sites from a single hub. In addition, it is anticipated that the spoke sites will develop some synergies as a result of their telemedicine technology that will allow them to communicate more effectively with each other and, importantly, with the communities most urgently in need of those services through the use of telemedicine technologies.

As I am sure that you are aware, rural America is experiencing a shortage of primary care physicians and specialist care providers. Primary care physicians are the keys to meeting the basic health care needs of patients in these areas because they are able to provide a wide variety of basic health services and identify medical problems needing further attention. Twenty-nine percent of rural residents live in Health Professional Shortage Areas (HPSA) compared to only nine percent of urban residents. Statistics from the Office of Statewide Health Planning and Development in California show that in northern California alone, all of Del Norte county and portions of Sonoma, Mendocino, Lake and Humboldt Counties are all experiencing Primary Care Health Professional Shortages.

People living in remote areas struggle to access timely, quality medical care. Residents of these areas often have substandard access to specialty health care, primarily because specialist physicians are more likely to be located in areas of concentrated population. Because of innovations in computing and telecommunications technology, many elements of medical practice can be accomplished when the patient and health care provider are geographically separated. This separation could be as small as across town, across a state, or even across the world.

Many areas in California, specifically Northern California are medically underserved areas. The United States Department of Health and Human Services has

classified portions of Sonoma, Mendocino, Humboldt, Del Norte counties and all of Lake county as federally designated medically underserved areas. Access to medical care, especially specialty and trauma care is limited and episodic at best.

Often, these communities have been medically underserved due to the concentration of specialty care and health education in urban and suburban neighborhoods. The use of Telemedicine serves to provide California's underserved patients with the medical services they need. Instead of the patient being forced to travel long distances to reach a specialized provider, the patient, instead, could see their local provider and receive specialized care via telemedicine saving time, improving safety and providing a much needed service for the patient. Additionally, the need for emergency transport of patients would be significantly decreased due to the ability of telemedicine to assist in the diagnosis of a trauma patient on site. California could significantly benefit from the development of telemedicine due to its large geographical area with a population located in big cities, smaller towns and isolated rural regions.

Telemedicine has the potential to improve the delivery of health care in America by bringing a wider range of services to underserved communities and individuals in both urban and rural areas. In addition, telemedicine can help attract and retain health professionals in rural areas by providing ongoing training and collaboration with other health professionals.

Santa Rosa Memorial Hospital is grateful for the initial funding that your subcommittee provided in fiscal year 2000. This funding will enable us to establish the first like. We look forward to working with you to secure additional funds which will enable us to link the remaining 10 sites throughout California's north coast.

Mr. Chairman, we believe that Santa Rosa Memorial Hospital's Northern California Telemedicine Network creates a national model for providing access to primary, specialty and trauma care services for remote and at-risk populations. Our desire is to provide a much needed service—primary and specialty care—to these underserved communities. Therefore, Santa Rosa Memorial Hospital is seeking $2 million in continued federal support in fiscal year 2001 for the implementation of the final phases of its Northern California Telemedicine Network. The federal investment will enhance our nation's commitment to protecting the health of our citizens. Your support for this effort will improve the quality of health care and contribute to the saving of lives for thousands of individuals in Northern California.

Thank you for your interest.

PREPARED STATEMENT OF THE AMERICAN ASSOCIATION OF NURSE ANESTHETISTS

The American Association of Nurse Anesthetists (AANA) is the professional association that represents over 28,000 certified registered nurse anesthetists (CRNAs) across the United States. The Association of Veterans Affairs Nurse Anesthetists (AVANA) represents over 500 certified registered nurse anesthetists across the United States and Puerto Rico. We appreciate the opportunity to present our testimony to the subcommittee and to offer recommendations on ways to cut costs without sacrificing quality of care for our nation's veterans.

BACKGROUND INFORMATION ABOUT CRNAS

In the administration of anesthesia, CRNAs perform virtually the same functions as physician anesthetists (anesthesiologists) and work in every setting in which anesthesia is delivered including hospital surgical suites and obstetrical delivery rooms, ambulatory surgical centers, health maintenance organizations, and the offices of dentists, podiatrists, ophthalmologists, and plastic surgeons. Today, CRNAs administer approximately 65 percent of the anesthetics given to patients each year in the United States. CRNAs are the sole anesthesia provider in at least 65 percent of rural hospitals which translates into anesthesia services for millions of rural Americans. CRNAs are also the sole anesthesia providers in numerous VA facilities.

CRNAs have been a part of every type of surgical team since the advent of anesthesia in the 1800s. Until the 1920s, anesthesia was almost exclusively administered by nurses. In addition, nurse anesthetists have been the principal anesthesia provider in combat areas in every war the United States has been engaged in since World War I. CRNAs provide anesthesia services in the medical facilities of the Department of Defense, the Public Health Service, the Indian Health Service, the Department of Veterans Affairs, and countless other public and private entities.

The most substantial difference between CRNAs and anesthesiologists is that prior to anesthesia education, anesthesiologists receive medical education while CRNAs receive a nursing education. However, the anesthesia part of the education is very similar for both providers, and both professionals are educated to perform

the same clinical anesthesia services. CRNAs and anesthesiologists are both educated to use the same anesthesia processes and techniques in the provision of anesthesia and related services. The practice of anesthesia is a recognized specialty within both the nursing and medical professions. Both CRNAs and anesthesiologists administer anesthesia for all types of surgical procedures, from the simplest to the most complex, either as single providers or in a "care team setting".

NURSING SHORTAGE PREDICTED: HOW THIS COMMITTEE CAN HELP

While both types of health professionals can provide the same or similar services, it costs the Department of Veterans Affairs significantly less to retain CRNAs because they draw a significantly lower salary than their physician counterparts. Therefore, it is in the best interest of the DVA, and this Committee, to implement policies and to support initiatives that assist in the effort to maintain adequate numbers of CRNA employees in the DVA.

The current employment scenario for CRNAs and the DVA is complicated by the predicted national nursing shortage that has been well publicized in the press and professional journals. Enrollments in nursing educational programs continue to decline and the nursing workforce continues to age and retire. Recruitment of nurse anesthetists for the DVA becomes increasingly difficult when the civilian sector faces such critical shortages. According to a recent survey by the AANA Administrative Management Committee survey, as many as 59 percent of civilian institutions in the country are also actively recruiting CRNAs.

Data gathered by Loretta Wasse, Deputy Director, Anesthesia Headquarters, indicates that 10–12 percent of CRNAs in the DVA will be retiring in the year 2000 alone. In real numbers, this means that the DVA will be losing over 50 CRNAs. These retirement numbers, combined with a nursing shortage, means that the DVA must work even harder at recruiting and retaining nurse anesthetists. This Committee can greatly assist in the effort to attract and maintain essential numbers of nurse anesthetists in the DVA by their support of competitive salaries.

One thing that consistently attracts and maintains good employees is an attractive salary. Competitive salaries could assist the DVA with retention of cost-effective CRNAs to provide anesthesia services for our nation's veterans. But providing competitive salaries for employees can be an ongoing battle, especially in the face of restricted budgets. This is where this Committee can help, by providing adequate funding for personnel.

If salaries cannot stay competitive in the face of a national nursing shortage, then the DVA will surely face a shortage of CRNAs. Historically, the cost to correct such a problem has been steep. The Department of Veterans Affairs faced a severe shortage of CRNAs once before in the early 1990s which was moderately corrected with the implementation of a locality pay system in 1991. In 1992, Congress expanded the authority of the local medical directors and allowed them to survey an expanded area to determine more competitive average salaries for CRNAs, which boosted pay and morale. Implementation of this expanded authority assisted the Department of Veterans Affairs in making great leaps in retention and recruitment of CRNAs at that time. However, the locality pay system has faltered in recent years.

When the system was instituted, it was intended that the local medical directors would utilize the system to keep Department of Veterans Affairs salaries competitive with local markets, for the purposes of recruiting and retaining high quality personnel. However, it seems that some local medical directors have learned to manipulate the system to avoid having to maintain competitive salaries without regular raises, thus insulating their bottom line from rising personnel cost in the short term. A prime example is the VA facility in Providence, Rhode Island where CRNAs have not seen a pay increase for six years.

The current locality pay system allows for many variables, which are not beneficial to CRNAs and may hamper efforts to maintain adequate numbers of nurse anesthetists. For example, CRNAs are not always included on the locality pay survey team, which makes it difficult to compare skills with salary. Often there is a large variance in the CRNA roles/scope of practice within surveyed hospitals, and there can be a large variance in clinical skill requirements for CRNAs within surveyed hospitals. All of these factors can lead to a miscalculation of average salaries for CRNAs.

Current salary data was collected from 10 random DVA facilities. This data illustrates the severity of the situation. Entry level salaries in the DVA are far below the entry level salaries within the same state. Nurse I, Step I represents entry level for new nurse anesthesia graduates at the VA. The pay levels are 10 percent or more below mean state starting levels. This fact alone will make recruitment of graduating CRNAs very difficult.

	Nurse I, Step I DVA entry level	Mean entry level for state
New York	$57,482	$71,482
Minneapolis	57,541	81,854
Seattle	59,421	73,900
San Diego	61,795	76,167
Dallas	58,192	76,385
Houston	62,535	76,385
Tampa	63,308	70,301
Boston	66,242	73,000
New Orleans	76,443	70,425

On the retention side, the advancement of a CRNA in the DVA from initial hire to Nurse III, Step 12 takes approximately ten years. CRNAs in many local communities reach the top in 4–6 years. Retention of new graduates will be difficult unless salaries are competitive with equally experienced CRNAs in the community.

We strongly encourage this Committee to take a role in facing this nursing shortage head on, by providing adequate funding for personnel and by supporting new locality pay legislation that would include the following components:

—CRNAs should be included on Locality Base Pay survey teams.
—On-site visitation should occur to help clarify discrepancies with locality pay.
—Hospitals being compared for locality pay should be of the same complexity.
—Clinical privileges/scope of practice must be included for a close job match.

RECOMMENDATION

In conclusion, the AANA urges the Committee to strongly recommend that DVA facilities utilize the locality pay system to offer competitive salaries for nurse anesthetists, thus retaining valuable employees that provide high quality, cost-effective care. We also hope the Committee members will urge your colleagues on the authorization committee to restructure the locality pay program.

The AANA thanks the Committee for the opportunity to testify before you today. We hope that we have provided information that will result in cost-savings for the DVA. If you have any questions or need further information, please do not hesitate to contact Greta Todd, AANA Associate Director or Federal Government Affairs, at 202–484–8400.

PREPARED STATEMENT OF THE JOSLIN DIABETES CENTER

Introduction Mr. Chairman, thank you for this opportunity to provide a status report on the Diabetes Project conducted jointly by the Joslin Diabetes Center in Boston, MA and the Department of Veterans Affairs, for which you provided $2 million in the fiscal year 2000 Appropriations Act. Our request for fiscal year 2001 to continue and expand this project with the VA is $5 million, of which the VA's costs represent approximately 40 percent. I am Dr. Sven Bursell, Principal Investigator of the project and Associate Professor of Medicine at the Harvard Medical School.

BACKGROUND

As you may recall, Joslin Diabetes Center has been involved with the Department of Defense and the Department of Veterans Affairs in a two-site pilot demonstration project for the advanced detection, prevention, and care of diabetes. The Joslin Vision Network (JVN) will be deployed to three sites with current year funding. The JVN employs telemedicine technology to image the retina of patients with diabetes, through an undilated pupil, and produces a digital video image that is readable in multiple formats. This project was funded only through the Department of Defense Appropriations Act in fiscal years prior to the current fiscal year. The Department of Veterans Affairs medical staff was eager to expedite the deployment of this advanced diabetes technology beyond the limited resources available through participation in the DOD funded project. We petitioned this Subcommittee for additional resources to be made available to the VA for discretionary diabetes detection and care. We extend our sincere appreciation to you for your response to that request.

FISCAL YEAR 2000 ACTIVITIES

The policy and program officials of the VA have visited Joslin Diabetes Center in Boston, and we have conducted several meetings here in Washington. Last week the consensus decision within the VA was to deploy the Joslin Vision Network (JVN) technology to three sites: Anchorage, Alaska, TriCities, Washington, and Billings, Montana. A Reading Center will be created and utilized in Seattle, Washington. In addition, the refinement of JVN technology, both hardware and software, will move toward developing a scalable system that is capable of widespread deployment agency-wide. This system, once completed, will be standards compliant and easily interfaced with the VA's VISTA Medical Records System.

1FISCAL YEAR 2001 REQUEST

For fiscal year 2001, we request that in the VA Medical Account $5 million be allocated to continue and expand this project. The positive response within the VA system indicates that with sufficient resources, the JVN technology would be deployed in a number of sites. As the technology, systems and production of equipment are standardized to off the shelf specifications, the expense per site will decrease. The request of $5 million includes $2 million to complete the refinement of the equipment and software to the point that the VA, and any other medical system, can purchase and utilize the advanced detection equipment and reading center technology.

With the other $3 million, the VA and Joslin would determine the sites with the most need for portable advanced detection and begin to train personnel and equip additional VA facilities to utilize the JVN technology. The specific goals for fiscal year 2001 include the following:

—Establish the utility of the JVN in multiple remote VA Outpatient settings;
—Improve adherence to scientifically proven standards of diabetes eye care and diabetes care;
—Improve/promote access to diabetes eye care;
—Increase number/percentage of patients with Diabetes Mellitus obtaining eye care;
—Provide education patients and providers in the clinical setting.

The use of the JVN equipment and expansion of screening opportunities are a major focus for fiscal year 2001 activities. Expansion of this pilot demonstration project will entail the planning and implementation of new deployments that currently being considered for TriCities, WA, Billings, MN, and Anchorage, ALA. The actual number of sites deployed to will depend on the telecommunications infrastructure at the identified sites and the ease and costs associated with interfacing the JVN technology into the existing infrastructure.

An equally important concentration of resources in fiscal year 2001 is focused on refining the technical core using outcomes based medical and case management scenarios to develop a diabetes healthcare model that is modular, customizable and that can be seamlessly integrated into the existing VA telemedicine systems. The overarching vision for the VA/JVN project is a web-based comprehensive diabetes health care system that can be interactively used by both patients and providers, that incorporates diagnosis specific education and training modules for patients and providers and that incorporates software applications that allow outcome measures to be statistically assessed and individual treatment programs to be interactively adjusted based on these outcome measures. The JVN Eye Health care system exists as a component of a comprehensive diabetes management system, incorporating other clinical disciplines such as endocrinology, vascular surgery and internal medicine.

In order to make the above vision a reality we will expend considerable effort in migrating the JVN demonstration technology platform into an application that is totally compliant with existing medical informatics infrastructures and the existing VISTA infrastructure of the VA system. This will encompass the integration of hardware and software in close collaboration with available resources from the VA VISTA program that will allow a highly scaleable transparent integration of the JVN Diabetes Eye Health Care system into the existing health informatics infrastructures of the VA system. The proposed development effort for fiscal year 2001 will result in an application that is cost sensitive and resource efficient with respect to support and maintenance of the JVN component for an accelerated deployment in the future.

For the fiscal year 2001 project phase, we have established the following tasks, targets, and activities:

—Deployment of a viable, sustainable, and refined operating JVN Diabetes Eye Health Care model which is currently being developed for this cooperative telemedicine project.
—Develop a modularized medical outcomes based telemedicine diabetes intensive treatment program in collaboration with the VA with outcome measures incorporated into software based on clinical results and research experiences of the fiscal year 2000 efforts.
—Develop curriculum based patient and provider educational modules. Plan and develop a web-based comprehensive Diabetes Management System.

CONCLUSION

Thank you for this opportunity to present this request for $5 million for fiscal year 2001 and status report for fiscal year 2000 on a medical technology breakthrough for the patients and health care system within the Department of Veterans Affairs.

ENVIRONMENTAL PROTECTION AGENCY

PREPARED STATEMENT OF THE COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

We would like to thank you for the opportunity to submit testimony to the Subcommittee in support of federal funding in fiscal year 2001 for an exciting research program focused on strengthening scientific understanding of the efficiency and sustainability of Soil Aquifer Treatment (SAT) for indirect potable reuse of highly treated recycled water. This research, which is sponsored by the County Sanitation Districts of Los Angeles County (LACSD) and Arizona State University (ASU), has national implications for enhancing sustainable development of communities by augmenting and protecting valuable groundwater supplies with recycled water. Over $5 million in cash and in-kind services has already been committed to the investigation by various research sponsors and participants. In addition, Congress has appropriated $2.9 million over the last two fiscal years to support the project. We are seeking an additional $1 million in fiscal year 2001 to continue this important research.

The Soil Aquifer Treatment Project is designed to provide the data necessary to support the rational design and operation of SAT systems, to predict water quality improvements provided by SAT, and to answer important public health questions. LACSD, which serves over five million people in 78 cities in Los Angeles County, California, and ASU are the project managers for the research in cooperation with the University of Arizona, the University of Colorado, Stanford University and the U.S. Geological Survey. We are joined in support of this funding by the Cities of Phoenix, Glendale, Mesa, Scottsdale, Tempe, and Tucson, Arizona; the Water Reclamation District of Southern California; the Los Angeles Department of Water and Power; the City of Riverside, California; the Bureau of Reclamation; the American Water Works Association Research Foundation, and the Water Environment Federation Research Foundation.

As the arid West continues to develop and as sources for additional water supplies become more and more scarce, an increasingly important source of water for agricultural and urban use is recycled water. This water has the potential to alleviate water shortages and to provide important augmentation to existing sources. Soil Aquifer Treatment, which is currently in use in California and Arizona, is one technology that has the potential to economically supplement traditional treatment and storage systems for existing and future potable water supplies. This study will be of value not only in the West but in a number of other areas around the country where groundwater recharge is used to supplement potable water supplies, to control sea water intrusion in coastal groundwater aquifers, to control land subsidence caused by declining groundwater levels, to raise groundwater levels to reduce the cost of groundwater pumping, and to provide a means of treating wastewater prior to discharge. Most notably, the states of Florida, Massachusetts, Nebraska, Michigan, New Hampshire, New Jersey, New York, South Dakota, Texas, and Wisconsin, who already operate groundwater recharge facilities, will benefit from this research. This research will also benefit aquifer storage and recovery systems located in eleven other states.

Our investigations of SAT will also help address the public health issues that all water suppliers in the nation face, such as source water protection and disinfection practices. The questions that will be answered by our study will be instrumental

to the identification, characterization, and treatment of compounds in our nation's water supply so that we may better protect the health of our citizens.

Further, soil aquifer treatment is being considered as one of the more promising means of treating stormwater and non-point source runoff. This will be an important breakthrough for dealing with these sources of pollution, since they are responsible for degrading over 70 percent of the country's rivers and lakes.

THE NEED FOR THE STUDY

While groundwater recharge using recycled water has been used in the United States for several decades and has been the subject of a number of studies, the scientific and technical community's ability to fully address a number of complex public health questions has been limited by the nature of existing testing and study methodologies. The funds approved by Congress in fiscal years 1998, 1999, and 2000, have enabled a higher standard of research on SAT by expanding the project's monitoring and analytical capabilities and will thus help enhance scientific understanding of the various biological, physical, and chemical processes in SAT that modify and improve the characteristics of recycled water. Funds have been used in part to follow up on research recommendations from the National Research Council's (NRC) Water Science and Technology Board study on the viability of augmenting potable supplies with recycled water. This work addresses critical areas of research identified by NRC as necessary to address the myriad of unknowns concerning SAT and the indirect use of recycled water for potable water supply including the fate and significance of disinfection byproducts, organics, and microbial pathogens.

Currently the SAT Project is in its third year of study, and valuable information has been developed to better understand the impact of SAT on water quality in terms of chemical and microbial pollutants, identifying monitoring criteria for viruses and other pathogens, and increasing public knowledge and awareness of SAT. Fiscal year 2001 funds will be used to address the following drinking water and treatment issues:

—evaluate the importance of the organic content of municipal drinking water sources in determining water quality after SAT;
—apply more sophisticated chemistry testing to further characterize organic pollutants in water before and after SAT;
—develop toxicity tests to identify pharmaceutically active compounds such as endocrine disruptors, and potential health effects;
—develop analytical methods to identify emerging pollutants such as new disinfection byproducts;
—apply newly developed tracers to track the movement of recycled water as it infiltrates the groundwater;
—adapt microbiological genetic techniques capable of determining pathogen viability into standardized monitoring techniques;
—develop digital soil mapping capabilities to assess the sustainability of SAT systems for removing pollutants;
—assess the sustainability of arsenic removal in SAT systems under different operating conditions;
—expand the public outreach element of the research project; and
—develop targeted epidemiologic studies to determine if the use of recycled water for groundwater replenishment has impacted public health.

The results of our investigation will help us to better understand the complex nature of recycled water and SAT so that we may take advantage of the benefits offered by indirect potable reuse based on groundwater recharge such as:

—additional water quality improvements;
—seasonal or longer-term storage without evaporative losses;
—protection of water resources against recontamination (with coliforms and parasites) by birds, mammals, and even humans; and
—prevention of algae growth and associated water-quality problems such as algae- derived taste and odor.

SAT DEFINED

Soil Aquifer Treatment can best be described as a groundwater recharge method using recycled water. SAT relies on percolation of the recycled water through soil and groundwater transport to further improve water quality prior to reuse.

—Soil percolation encompasses several processes that occur as water seeps downward through the soil under the influence of gravity to enter the groundwater system. The soil acts as a filter to improve the characteristics of the recycled water through physical, chemical, and microbiological processes.

—Groundwater transport: After reaching the underlying aquifer, groundwater moves slowly to extraction wells. During transport, further water quality benefits are realized through a number of physical, chemical, and biological processes.

PURPOSE AND GOAL OF THE STUDY

The SAT Project is the first research program to focus broadly on SAT as a system. Its goals are to provide the data necessary to support the engineered design and operation of SAT systems, and to address factors that are of interest to health regulators for the development of regulations governing groundwater recharge projects.

Specific objectives of the project are to:

—characterize processes that contribute to organic chemical, nitrogen and pathogen removal and transformation during transport through the soil percolation zone and underlying groundwater aquifer;
—investigate and model relationships among above-ground treatment, wetlands polishing, and SAT;
—identify monitoring criteria that will provide proper assurances regarding the elimination of viruses and other pathogens;
—produce a framework or model within which SAT systems can be designed and operated to meet regulatory criteria.
—compare the effectiveness of SAT to other technologies; and
—increase public knowledge and awareness of SAT.

The effectiveness of SAT will be investigated and systematically analyzed to determine the efficacy of the protective barriers inherent in SAT systems: the interface at the soil-water boundary of the infiltration surface; soil percolation; and groundwater transport. The water quality benefits derived from the treatment in each barrier will be evaluated based on the reductions achieved in levels of organic carbon, nitrogen, and pathogens.

Field investigations and data gathering are being performed at six full- or pilot-scale recharge sites in California and Arizona. Additional information is being generated using drinking water from Texas. These sites offer a range of different effluent qualities and physical conditions such as depth to groundwater, soil and sediment type, etc. The facilities are located in Phoenix, Mesa, and Tucson, Arizona; Riverside, Los Angeles, and Los Angeles County, California; and Houston, Texas. Laboratory work is also being conducted to analyze the data and develop the applicable models. Some of the more unique research elements include use of genetic techniques to isolate and identify viruses; analytical methodologies capable of identifying over 90 percent of the materials comprising the organic makeup of groundwater and recycled water; unique tracers to track the movement of recycled water as it infiltrates the groundwater; and a public education/outreach component to disseminate the results of the study.

On behalf of the many public agencies, cities, and universities that are participating in this exciting and promising research project, we would like to thank the Subcommittee once again for the opportunity to submit this statement and for your previous support for this project. Soil Aquifer Treatment has great potential to alleviate the coming critical water shortages in the arid western United States and provide valuable information on a national level for source water protection and supply. Please feel free to contact our Washington representative John Freshman at (202) 298–1895 if we can provide you with any further information. We thank you again for your commitment to this project over the last three fiscal years and ask you for your renewed support to continue the research on this important project.

PREPARED STATEMENT OF THE STATE AND TERRITORIAL AIR POLLUTION PROGRAM ADMINISTRATORS AND THE ASSOCIATION OF LOCAL AIR POLLUTION CONTROL OFFICIALS

The State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO) appreciate this opportunity to provide testimony regarding the fiscal year 2001 proposed budget for the U.S. Environmental Protection Agency, particularly regarding grants to state and local air pollution control agencies under Sections 103 and 105 of the Clean Air Act.

STAPPA and ALAPCO are the national associations of state and local air pollution control agencies in the 54 states and territories and over 150 major metropolitan areas across the United States. Under the Clean Air Act, state and local air quality officials have the primary responsibility for implementing our nation's clean

air program on behalf of our citizens. This responsibility calls for state and local air agencies to address particulate matter, ground-level ozone, toxic air pollution, acid rain and other types of air pollutants, many of which cause significant adverse health effects, including cancer, severe respiratory ailments and premature death. Air agencies must address new initiatives that focus on emerging problems, as well as carry out the core elements of our programs, which serve as the backbone of our nation's clean air effort.

STAPPA and ALAPCO are very concerned that the President's request for state and local air grants in fiscal year 2001 represents merely level funding over the fiscal year 2000 appropriation. While EPA is characterizing the budget request as including a $5-million increase over last year, the fact is that it is not an increase at all, since Congress already provided $5 million under Section 105 last year within EPA's Environmental Programs and Management (EPM) budget for regional haze activities. The fiscal year 2001 request merely shifts those Section 105 funds from the EPM account to the State and Tribal Assistance Grants budget, resulting in no net increase to state and local air quality agencies.

We are very worried that a budget request reflecting level funding will not address the serious funding shortfall facing state and local air quality agencies and would impede our ability to address the important public health problems throughout the country that result from air pollution. Accordingly, STAPPA and ALAPCO request an increase of as much as Congress believes is possible, but at least $10 million above the President's request for fiscal year 2001, which would provide a total of $213.7 million.

STATE AND LOCAL AIR PROGRAMS ARE NOT ADEQUATELY FUNDED

For many years, state and local air pollution control agencies have faced a serious deficit in federal grants. This shortfall is due to the fact that federal funding under Section 105 of the Clean Air Act has not kept pace with trends in air pollution control. Since fiscal year 1995, Section 105 grants have decreased by over $25 million, while the costs and responsibilities facing state and local programs under the Clean Air Act have increased markedly. These responsibilities include both ongoing activities to preserve the improvements in air quality we have already made as well as new initiatives to address emerging issues.

The budget shortfall is exacerbated by the fact that EPA, for a number of years now, has set aside portions of Section 105 grants to support activities that should be funded through EPA's own budget. For example, although funding training activities is clearly a federal responsibility, EPA has been using state and local grants, inappropriately, for these purposes for many years and plans to do so again in fiscal year 2001 (totaling $3.98 million). We have recommended each year, in commenting on the agency's proposed grant allocation, that training activities be funded through EPA's own budget. In addition, substantial Section 105 grants have been used to support the Emissions Inventory Improvement Program for several years. While this program is a worthwhile one that provides important information, we do not believe it is appropriate for state and local agencies to continue funding this program and have recommended that EPA support the effort with its own budget ($675,000 in fiscal year 2001). Finally, in the proposed allocation for fiscal year 2001, EPA is including a "set-aside" for a heavy-duty truck and bus idling and hoteling characterization study (totaling $300,000). We believe EPA should fund this study from its own budget, rather than through Section 105 grants. These types of diversions of Section 105 funding only diminish the amount of the funds distributed to state and local agencies and worsen our budget shortfall.

Several years ago, EPA, in cooperation with STAPPA and ALAPCO, conducted an intensive study to determine the costs of Clean Air Act-related activities that Section 105 grants should support. This analysis concluded that a total increase of $98 million in federal grants to state and local air agencies under Section 105 of the Clean Air Act would be necessary to operate an adequate, although not perfect, air quality program. This calculation included both additional needs for emerging programs and deficiencies in existing activities and did not incorporate the costs of the fine particulate matter monitoring effort that has been funded with Section 103 grants in recent years. We have provided the Subcommittee with details of this study in recent years and would be happy to supply this information again, if needed.

In spite of the fact that this study was carried out in cooperation with EPA and that the agency recognized the need for additional funding, to date the Administration's budget proposals have not called for the grant increases that this study indicated are necessary.

While we realize Congress has many competing and worthy budget needs it must address and it would be unrealistic to expect to receive an increase of $98 million this year, we are requesting that Congress provide as large an increase as is possible. Even an amount such as $10 million would help to ameliorate some of the shortfall we face.

An increase would help to address many activities, including transportation-related projects; land use and air quality programs; compliance assistance programs, especially for small businesses; development, replacement and/or upgrading of monitors (apart from fine particulate matter monitoring); collection of essential emission and pollutant data; minor source inspections and permits; training; implementation of ozone strategies; multi-state approaches to regional air quality problems; public education and outreach. However, probably one of the most worthy issues we could address with additional grant funding is that of toxic air pollution.

CONTROL OF TOXIC AIR POLLUTION REQUIRES SIGNIFICANT RESOURCES

The Clean Air Act includes a comprehensive program to control emissions of toxic air pollution, specifically through provisions addressing a list of 188 hazardous air pollutants. The Act basically has a two-pronged approach: the first element calls for a technology-based effort in which EPA establishes Maximum Achievable Control Technology (MACT) to apply to sources of the listed pollutants and the second phase focuses on risk-based activities to address the risks that remain after the MACT standards have been implemented. Additionally, the Act includes additional provisions to address other issues, including air toxic air emissions in urban areas, among other things.

State and local agencies have significant responsibilities under the toxic air pollution provisions of the Clean Air Act, many of which are costly to carry out. For example, state and local agencies are required to implement the many MACT standards EPA has established. Furthermore, if EPA misses its deadlines for establishing the standards, which is very possible for some of the MACT standards that are supposed to be set by this year, the Clean Air Act calls upon state and local agencies to develop the standards themselves, a costly and resource-intensive activity. Additionally, many sources of toxic air pollution are minor sources, the permitting of which is expensive and is not covered by permit fees under Title V of the Clean Air Act.

In addition to the MACT-related responsibilities state and local agencies face, it will be necessary to assess the extent of the toxic air pollution problem in our country that will remain after the imposition of the technology-based standards. This step, which will be necessary to develop additional strategies to address both national and local problems, including "hot spots", will require state and local agencies to conduct significant monitoring and data analysis. But the resources used on such activities will be money well spent, since it will result in information that is essential for crafting appropriate control strategies that will address problem emissions.

The activities mentioned above are just some of the efforts related to toxic air emissions that will require significant resources. While state and local air agencies desperately need many millions of dollars in grant increases to address these and other air-related activities, we recognize Congress faces many fiscal constraints. Accordingly, we are requesting as much in additional grants as Congress can provide, but at least $10 million that could be put to excellent use in addressing toxic air pollution and other air quality issues.

THE CLEAN AIR PARTNERSHIP FUND SHOULD BE SUPPORTED

STAPPA and ALAPCO are pleased that the Administration's requested budget calls for $85 million in additional funds for the Clean Air Partnership Fund, which will provide state and local agencies with excellent opportunities to develop multi-pollutant control strategies aimed at reducing air pollution in a cost-effective manner. We believe that the harmonization of various clean air goals is critical and we applaud EPA for promoting such activities. In fact, we have been engaged in discussions with our governmental counterparts regulating the energy and utility sectors and we agree that there is a need for multi-pollutant strategies with energy efficiency components, such as those that the Clean Air Partnership Fund will help foster. Such projects can help to increase certainty to industry by promoting integrated efforts to address air pollution, rather than requirements that apply to individual pollutants incrementally.

However, while the partnership is a laudable new program, there are still many other critical activities that we can carry out only through traditional federal grants provided under Sections 103 and 105 and other authorities of the Clean Air Act. The partnership program should not be a substitute for those ongoing grant programs,

nor does it address the enormous budget shortfall state and local agencies face. More specifically, the funds for the Clean Air Partnership Fund should be in addition to those federal grants (discussed earlier) that assist state and local air pollution control agencies in fulfilling their responsibilities.

CONCLUSION

In conclusion, we are extremely disappointed that the President's budget request calls for level funding for state and local air grants and we recommend at least a $10-million increase in fiscal year 2001.

We support the Clean Air Partnership Fund and urge Congress to include funding for this program in the fiscal year 2001 appropriation. We do not believe this program can substitute for state and local operational air grants under the Clean Air Act, however, and the adoption of the partnership should not adversely affect appropriations for our current activities.

Thank you very much for this opportunity to provide you with our testimony. Please contact us if you have questions or require any additional information.

PREPARED STATEMENT OF THE ASSOCIATION OF STATE DRINKING WATER ADMINISTRATORS

INTRODUCTION

The Association of State Drinking Water Administrators (ASDWA) is pleased to provide testimony to the VA, HUD and Independent Agencies Subcommittee on fiscal year 2001 Appropriations for the U.S. Environmental Protection Agency. ASDWA represents the drinking water programs in each of the fifty states and six territories in their efforts to ensure the provision of safe, potable drinking water to over 250 million consumers nationwide. ASDWA's primary mission is the protection of public health through the effective management of state drinking water programs that implement the national Safe Drinking Water Act (SDWA).

TODAY'S MESSAGE

States have been implementing Federal requirements for safe drinking water for more than 25 years. The 1996 Amendments to the SDWA significantly increased state drinking water program responsibilities and called for a host of new regulatory initiatives to be developed and implemented. The Act also created a new Drinking Water State Revolving Loan Fund (DWSRF) to provide loans to public water systems to enhance both their infrastructure and compliance capabilities and to offset some of the programmatic costs. The Act authorized annual appropriations of $100 million for the state Public Water System Supervision (PWSS) program and $1 billion for the DWSRF. Since the SDWA enactment in 1996, neither of these authorizations have been fully requested in the President's budget nor appropriated by the Congress. As a result, state drinking water programs are facing a significant shortfall and cannot keep pace with current and future regulatory and other Agency SDWA initiatives.

THE FACTS

The PWSS program

The State PWSS program has not had a funding increase since fiscal year 1997, the year in which the SDWA was reauthorized. Yet, states have been expected to maintain effective implementation of all of their pre-1996 core responsibilities and take on an overwhelming list of additional tasks, programs, and regulatory implementation requirements, the majority of which are expected to occur over the next five years.

As a result of the 1996 Amendments, states are now responsible for development, implementation, and enforcement of more than 20 new regulations within a five year period, including radon, arsenic, sulfate, groundwater, radionuclides, filter backwash, the microbial/disinfection byproducts cluster, unregulated contaminant monitoring, and Class V wells under the Underground Injection Control program. States are also responsible for implementing revisions to the surface water treatment, lead and copper, public notification, and variances and exemptions rules.

Massive new programs for capacity development, drinking water source assessment and delineation, consumer confidence reports and public outreach, and expanded operator certification requirements are also mandated over the next five years. These new requirements are in addition to the pre-96 core state program responsibilities for activities such as compliance monitoring, data management, train-

ing, and enforcement for 88 regulated contaminants. States also ensure public health protection through preventive measures such as disease surveillance, risk communication, sanitary surveys, laboratory verification, permitting, and emergency response.

ASDWA and EPA undertook an initiative last year to update the resource needs and funding gap for state drinking water programs. Although the report is yet to be published, the results indicate that there are significant funding and staff shortfalls for state PWSS programs, as the table below and attached charts indicate. These are the shortfalls that remain after the addition of the $87.3 million in PWSS funds, the significant contribution made by state programs, and authorized set-aside program funds from the DWSRF.

[Dollars in millions]

Year	Staff shortfall	Funding shortfall
1999	1,627	$83
2001	2,008	104
2003	2,389	159
2005	2,397	185

Without a sizeable increase in PWSS funding, state drinking water programs will be forced to continue deciding on implementation priorities, redirecting critical resources from high priority public health efforts to the "rule-of-the-day," and ultimately fall far short of achieving the significant new health protections envisioned under the 1996 Amendments.

Given the resource shortfall expected in fiscal year 2001, ASDWA respectfully requests that the Subcommittee appropriate $190 million to support the PWSS Program for fiscal year 2001 even though the current authorization is set at $100 million.

THE DWSRF

The 1996 SDWA authorized $1 billion annually from fiscal year 1995 through fiscal year 2003 to establish and support a drinking water state revolving loan fund. The primary purpose of the DWSRF is to facilitate water system compliance with national primary drinking water regulations through the provision of loans to water systems to improve drinking water infrastructure.

The Water Infrastructure Network (WIN), a coalition of water, wastewater, engineering, construction, and financing organizations, has recently completed an assessment of drinking water and wastewater infrastructure needs. The report, entitled Clean and Safe Water for the 21st Century, concludes that, "America's water and wastewater systems face an estimated funding gap of $23 billion a year between current investments in infrastructure and the investments that will be needed annually over the next 20 years to replace aging and failing pipes and meet mandates of the Clean Water Act and Safe Drinking Water Act." When the report combines this need with the cost of building, operating, and maintaining needed drinking water and wastewater systems over the same period, the figure jumps to nearly $2 trillion dollars. On an annual basis, this would require $95 billion, of which approximately $50 billion is attributable to drinking water infrastructure needs and $45 billion for wastewater needs. If this gap is not closed, much of the progress already made will be lost to aging and deteriorating infrastructure and many of the public health protections envisioned under the new SDWA will not become a reality.

ASDWA respectfully requests that the Subcommittee appropriate at least the $1 billion authorized to support the DWSRF Program for fiscal year 2001 and work with pertinent Congressional committees to create funding mechanisms to close the gap.

RESEARCH

The use of sound science is the foundation of the new standard-setting process under the SDWA Amendments of 1996. Extensive research, particularly in the area of health effects, will be critical to ensure that future contaminants are being regulated at the levels needed to provide a meaningful opportunity for risk reduction to protect the public. While recent efforts have been successful in closing the gap, ASDWA strongly supports designating and funding drinking water research at $48.87 million as requested in the President's fiscal year 2001 budget. ASDWA also supports the $5 million request by the AWWA Research Foundation to fund priority drinking water research needs.

ASDWA respectfully requests that the Subcommittee appropriate the requested level of $48.87 million for drinking water research and $5 million for research conducted by AWWARF.

EPA DRINKING WATER PROGRAM AND COMPLIANCE ASSISTANCE EFFORTS

As a result of the 1996 SDWA Amendments, EPA's Office of Ground Water and Drinking Water (OGWDW) took on many new challenges including rule and program development covering a wide range of new initiatives. As part of this process, they have greatly expanded the role of the public and other stakeholders in helping define and develop these rules. Like the states, OGWDW faces a critical need to ensure that adequate funding is available to meet the myriad new requirements in the law. ASDWA therefore supports the President's budget request of $37.8 million for drinking water regulation development and $32.2 million for drinking water implementation activities for EPA.

ASDWA respectfully requests that the Subcommittee appropriate the requested level of $37.8 million for drinking water regulation development and $32.3 million for drinking water implementation activities for EPA.

CONCLUSION

The SDWA of 1996 created an enormous new, expansive drinking water program that calls for many of the requirements to be implemented within the next five years. Many of the initiatives must begin today to ensure full implementation in the future. Without a fully funded, well-trained and technically competent state drinking water program structure in place, many of these new efforts will never realize their full potential.

State drinking water programs are committed to achieving the goals of the new Act but are in desperate need of sufficient funding to carry out their public health protection mission effectively and efficiently. The tremendous number of SDWA generated new regulatory requirements combined with a significant number of new programmatic initiatives places drinking water programs in the untenable position of being unable to meet the expectations of Congress, the EPA, and the public because the necessary tools and funding were not provided with the expanded program responsibilities. States are fast approaching a crossroads in their drinking water public health protection responsibility. Many would argue that years of inadequate funding and erosion of current funding levels have already placed the program in jeopardy.

ASDWA strongly urges this Subcommittee to fund state programs at a level that is sufficient to ensure success in their efforts to meet the new public health goals of the SDWA. It would be a travesty if five or ten years from now, we look back and see that much of the opportunity and vision of the new law was lost or only partially accomplished because we did not have the commitment and foresight to provide the funds needed to make it a reality.

A strong drinking water program supported by the Federal government, states, water utilities, and the public will ensure that the quality of drinking water in this country continues to improve and that the public can be assured that a glass of water is safe to drink no matter where they travel or live. Achieving these goals, however, will require a significant financial commitment from all parties.

ASDWA appreciates the opportunity to present testimony before the Subcommittee for its consideration.

PREPARED STATEMENT OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

The Metropolitan Water District of Southern California (MWD) is pleased to submit comments for the record regarding programs contained in the U.S. Environmental Protection Agency's (EPA) fiscal year 2001 budget for your Subcommittee's hearing on April 7.

MWD is responsible for meeting the supplemental water requirements of 16 million people living in the Southern California coastal plain and the economy which supports them. Our sources of water supply are the Colorado River and surface waters from Northern California. Of particular interest to MWD and our 27 member agencies are those federal programs that provide assistance and facilitate partnerships for addressing critical water resources issues.

One of the most challenging water resource issues in Southern California is ensuring adequate supply of high quality water. To increase our ability to achieve these goals, we strongly urge that you designate $2 million of funding appropriated

for State and Tribal Assistance Grants (STAG) to ensure the continuation of the Desalination Research and Innovation Partnership (DRIP). DRIP is a major applied research program which seeks to develop and demonstrate new and innovative technologies to substantially reduce the cost of desalinating Colorado River water and other brackish water sources. DRIP is also investigating ultraviolet (UV) light technologies for disinfection and biofouling control in potable water applications.

MWD also asks that you support adequate funding for another STAG program, the Drinking Water State Revolving Fund (DWSRF). Although the President's budget requests increased funding over the amount enacted for the prior fiscal year, the level falls short of the $1 billion authorized by Congress. We urge that you support funding at the authorized level. We further ask that you fully support the $48.9 million request for safe drinking water research in the President's budget and designate $5 million of this amount for research through the American Water Works Association Research Foundation (AWWARF).

While significant progress has been made in improving the quality of our nation's water, many surface and ground waters do not meet water quality standards. As our understanding of the relationship between the contaminants found in our water supply and their effect on human health increases and detection methods are improved, new risks have been uncovered. Adequate protection of drinking water quality requires research to identify contaminant sources and effective control methods, financial assistance for implementation of end-of-the-pipe treatment and source water protection measures, and compliance monitoring to ensure existing laws and regulations are upheld.

THE STATE AND TRIBAL ASSISTANCE GRANTS (STAG)

Desalination Research and Innovation Partnership (DRIP) Funding. Water quantity and quality are priority issues in Southern California where approximately 60 percent of the water used is imported. Much of our imported supply is from the Colorado River, a source that is high in salinity (i.e., mineral content). Although not a health concern, high salinity can cause scaling and corrosion of plumbing fixtures, adversely affect salt-sensitive agricultural crops, and limit the ability to recycle water. Local groundwater supplies cannot always be utilized, in part because of high salinity.

Several years ago, MWD and its partners embarked on a program (DRIP) to develop innovative technologies for cost-effectively reducing salinity in Colorado River and other non-traditional sources such as brackish groundwater, municipal wastewater, and agricultural drainage water. The program was subsequently expanded to evaluate new technologies for the inactivation of pathogens resistant to commonly used disinfectants. In its first three years, DRIP has investigated the use of ultra-low pressure membrane technologies that will improve the economics of salinity removal from a variety of water sources, and the effectiveness of ultraviolet light as a disinfectant for resistant pathogens like Cryptosporidium. In part because of these early successes and to address the statewide concern with high salinity, the partnership now includes water utilities from Northern California. MWD asks that you identify $2 million of the STAG appropriation to support the continuation of DRIP. This funding will leverage the financial commitments made by the DRIP partners and support near-term activities aimed at demonstrating large-scale reverse osmosis (RO) technologies, increasing the amount of water recovered from RO processes, and improving methods of brine handling and disposal.

Drinking Water State Revolving Fund. STAG funding is also critical for the DWSRF. In California, water suppliers have identified drinking water infrastructure projects totaling in excess of $7 billion that could benefit from low-cost DWSRF financing. Nationwide, community water systems estimate they must invest over $138 billion over the next 20 years to ensure delivery of safe drinking water. Of this amount, approximately $12 billion is needed to meet current Safe Drinking Water Act (SDWA) requirements. Low-cost financing for projects which ensure safe drinking water supplies is critical for protecting the health of the more than 240 million Americans served by public water systems, and MWD strongly urges that you provide $1 billion, the amount authorized by Congress for fiscal year 2001. This amount, while greater than the amount requested in the President's budget, is still only a small fraction of the funding needed by drinking water suppliers to meet existing SDWA requirements.

Clean Water State Revolving Fund. Significant investments are needed to repair and replace aging municipal wastewater infrastructure and combined sewer systems. Low-cost financing is necessary to support substantial municipal water quality infrastructure needs over the next 20 years. Further, there is a need to provide funding for qualifying projects that prevent nonpoint source pollution, and EPA has

proposed allowing states to use up to 19 percent of their Clean Water Act State Revolving Fund (CWSRF) capitalization grants to provide grant funding of up to 60 percent of the cost of such projects. The President has requested $800 million for fiscal year 2001 for the CWSRF to support these activities, many of which are vital for ensuring protection of drinking water sources. MWD asks that you support funding at least at the level in the President's budget. The President's request represents a substantial decrease from the funding enacted for the prior fiscal year and may not be sufficient to fully meet the needs of the CWSRF program.

NON-POINT SOURCE GRANTS

Another critical source of funding for source water protection projects is grants under the Clean Water Act's Section 319 Non-point Source Program (NPS). NPS grants are particularly important for smaller projects and projects where debt financing is unsuitable. Further, the NPS grant program is necessary to support the many watershed management activities fostered by the states. The President has requested $250 million for NPS grants for fiscal year 2001, and MWD requests your support at the level in the President's budget. Although this amount is an increase over last year's budget, nonpoint source pollution is the primary cause of impairment of our nation's waterways.

OTHER GRANT PROGRAM

Other EPA grant programs which help maintain or improve water quality and need your support are the CWA Section 106 Control Agency Resource Supplemental Grants ($160.5 million), Wetlands Program Development Grants ($17.3 million), and the Water Quality Cooperative Agreements (WQCA; $19.0 million). Among other activities, section 106 grants provide funding for monitoring, water quality planning, and development of Total Maximum Daily Loads for impaired water bodies. The wetlands grants program will enable EPA to meet its goal of a net gain of 100,000 acres of wetlands by the year 2005. Wetlands provide an important cleansing mechanism which can protect drinking water sources. WQCA provides funding to address water quality problems created by storm water, combined sewer overflows, and confined animal operations, all of which potentially threaten drinking water sources. Your support for the President's fiscal year 2001 budget request for the above programs will enable EPA to carry out its mission.

SAFE DRINKING WATER RESEARCH

Scientifically sound research provides the underpinnings for effective drinking water quality programs. EPA's fiscal year 2001 budget, under its strategic goal of clean and safe water, includes $48.9 million for safe drinking water research. This research will focus on developing dose-response data for certain contaminants such as disinfection by-products (DBPs) and pathogens, filling data gaps for contaminants on the Candidate Contaminant List (CCL), and identifying cost-effective methods for removing and inactivating microbial contaminants. Although not specifically identified in the budget, we understand that EPA's research may also focus on perchlorate.

Dose-response data is critical for the proper characterization of potential acute risks of drinking water contaminants, yet reliable data is frequently absent. The CCL is the basis of potential new drinking water regulations, and accurate data is essential in order to determine whether new regulations are warranted. The proper evaluation of treatment technologies for contaminant removal will facilitate the adoption of needed regulations. Perchlorate has been detected in groundwater sources of drinking water, and approximately two dozen wells in California have been taken out of service as a result of concentrations which exceeded state action levels.

We ask that you fully support the President's request of $48.9 million for drinking water research and designate $5 million of this amount for research by AWWARF on issues consistent with EPA's priorities. AWWARF and public water suppliers will provide 100 percent matching funds, and thus offer an opportunity to leverage EPA's research budget.

DRINKING WATER—PUBLIC WATER SYSTEMS SUPERVISION PROGRAM GRANTS

EPA's 2001 budget allocates $93.3 million for Public Water Systems Supervision Program grants. This funding is necessary for states with primary enforcement responsibilities to carry out their duties, including implementation of the 1996 SDWA regulations. Additional resources will be necessary to implement the changes result-

ing from the 1996 SDWA amendments, and we ask that you support this funding level.

We look forward to working with you and your Subcommittee. Please contact Brad Hiltscher, MWD's Legislative Representative in Washington, D.C. at (202) 296–3551, if we can answer any questions or provide additional information.

PREPARED STATEMENT OF THE NATURE CONSERVANCY

INTRODUCTION AND BACKGROUND

Mr. Chairman and members of the Subcommittee, I appreciate the opportunity to submit written testimony on fiscal year 2001 appropriations for the U.S. Environmental Protection Agency (EPA).

The Nature Conservancy is an international, non-profit organization dedicated to conserving biological diversity. Our mission is to preserve the plants, animals, and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. The Conservancy has more than one million individual members and over 1,500 corporate members; we have programs in every state and in 20 nations. To date, our organization has protected more than 11 million acres in the 50 states and Canada and has helped local partner organizations preserve millions of acres overseas. The Conservancy itself owns more than 1,600 preserves—the largest private system of nature sanctuaries in the world.

Biological diversity is important for a number of reasons. Species and natural communities harbor genetic and chemical resources that contribute to advances and products in medicine, agriculture and industry. The value of these goods is enormous; however, it represents only a fraction of the value these ecosystems provide to humanity in terms of services, such as waste assimilation and treatment, climate regulation, drinking water, and flood control. One estimate of the value of these services for the entire biosphere is $33 trillion, which is nearly double the gross national product (Costanza et al 1997). In addition to these benefits, the environment also serves as an instrument through which educational, cultural, aesthetic and spiritual values are often expressed.

The Nature Conservancy and the Association for Biodiversity Information recently released a new study documenting America's astonishing natural abundance. Among the book's key findings are the following: The United States is home to more than 200,000 native species of plants and animals and ranks at the top in its variety of mammals and freshwater fish. Ecosystems in the United States are also among the most diverse. They range from tundra, to deserts, prairies, and various forest types. However, as many as one-third of the nation's species are at risk and at least 500 species have already gone extinct or are missing. The single biggest threat to species survival is loss of habitat, which generally occurs as a result of human activities. Almost 60 percent of America's landscape is already severely altered.

Reversing the trend will require working at larger scales and across traditional, geopolitical lines. The Nature Conservancy is committed to this effort. In fact, we are pledging to invest $1 billion in private funds over the next five years to protect critical natural areas around the country and abroad. These investments alone, however, will not be enough. True conservation success will only be achieved through the work of partners, including the Federal government. Funding is needed at the Federal level to support on-the-ground conservation projects and to ensure policies that promote a sustainable environment. Without public investments in conservation, private investment strategies may in fact be undermined.

EPA is responsible for administering a number of programs that protect public health and the environment. The Nature Conservancy offers support for five programs with which we have had direct experience and that we are confident help preserve biodiversity. The five programs include the following:

—Nonpoint Source Management Program (Section 319 Program)
—Coastal Watersheds and National Estuaries Program
—Wetlands Protection Program
—Clean Water Act State Revolving Fund
—Innovative Community Partnership Program

The first four programs, which focus on water quality, have important conservation benefits, especially with regard to the wealth of aquatic plants and animals in the United States. The fifth program supports local efforts to develop sustainable solutions to address multiple forms of pollution, such as water and land pollution.

Before presenting our comments regarding the five programs, we wish to commend EPA for working to align its strategic planning and budgeting processes. The

goals articulated by EPA in its Strategic Plan and fiscal year 2001 Budget are indeed challenging. The ability of the Agency to achieve these goals, however, will be limited if resources are not commensurate with the scope of work to be completed. One means to demonstrate the Federal commitment to the nation's natural resources is to ensure that EPA remains a vital and healthy institution.

RECOMMENDATIONS

Nonpoint source management program (section 319 program)

Nonpoint source pollution is the leading cause of water quality problems. Surface runoff from farms and urban areas contain sediment and other pollutants that result in beach closures, destroyed habitat, unsafe drinking water, fish kills, and other severe environmental and human health problems.

The Section 319 program affords EPA and states the opportunity to address nonpoint source problems on a site-specific basis but within a watershed context. The program is flexible in that it does not prescribe specific solutions. Instead, the local parties involved determine remedies. Under the Section 319 program, The Nature Conservancy and its partners have implemented science-based solutions for nutrient and sediment problems in some of the rivers and streams in which we are working. We have also increased public investments by matching resources and using the funds to leverage other private contributions.

The Nature Conservancy supports an appropriation of $300 million under the State and Tribal Assistance Grants Account and an appropriation of $17 million under the Environmental Programs and Management account for the Section 319 program. These recommendations reflect increases above the President's request by $50 million and $100,000, respectively.

While the Conservancy is appreciative of Federal funding constraints for discretionary programs, we believe the magnitude of nonpoint pollution warrants increased appropriations in this area. The additional resources to the Section 319 program will enable states to complete their comprehensive management plans and target money to local projects of importance. Additional resources could also be used to help fund monitoring activities, which would enable specific projects and tools to be evaluated for their effectiveness. This is an area in which resources are drastically lacking.

Coastal watersheds program, including the national estuary program

Shallow-water habitats such as estuaries, coral reefs, mangroves and seagrass beds are important to the nation's economic, environmental and social well being. They provide habitat for various life stages of important plants and animal species, including threatened and endangered species and those having commercial or recreational value. They also harbor species that filter pollutants from water, control sedimentation, and protect against shoreline damage and floods. The ability of these systems to perform these functions, however, is increasingly being curtailed by human activities.

The Nature Conservancy is working to better understand the connections among terrestrial, riverine and marine systems on an ecological as well as sociological basis. We are identifying specific sites and biological endpoints to conserve, assessing the threats to these targets, and working with local partners to implement economically viable solutions for the communities affected. Similar work is being performed at the 28 demonstration sites listed under the National Estuary Program, which is administered under EPA's Coastal Watersheds Program.

The Nature Conservancy recommends an appropriation of $20 million under EPA's Environmental Programs and Management account for the Coastal Watersheds Program in fiscal year 2001. This recommendation reflects a $3.9 million increase above the President's request. The increased funds will provide much needed support for the base operations of the 28 demonstration sites under the National Estuary Program. The Conservancy, however, recommends that some of the additional funds be used to support other local coastal watershed activities, beyond the 28 estuaries, that are recognized by states as important conservation and restoration areas.

Wetlands protection program

Like the nation's riverine and coastal systems, wetlands harbor significant biodiversity. They are vital to numerous plants and animals, including those that are threatened and endangered like the whooping crane, salmon, and Florida panther. They also provide important services to humans: natural products for consumption, increased water quality, flood protection and shoreline erosion control, and recreational and educational opportunities. Despite these important values, more than half of the nation's wetlands has vanished.

To stop these losses, a number of Federal and state protections have been put in place. Often, however, the attentions have focused on the numbers or acres of wetlands saved instead of their functional value. We wish to commend EPA in its efforts to shift attention toward the importance of the functional value of wetlands in addition to their sheer quantity.

We believe the Agency's work with states and others to develop biological assessment tools has been especially important. Biological assessment tools are used to evaluate the ecological health and condition of a wetland, diagnose particular stresses on wetlands biota, better define management approaches, evaluate success of restoration and protection activities, and develop related water quality standards. These tools will enable more informed decisions to be made about wetland uses and management.

The Nature Conservancy recommends an appropriation of $18.5 million under the Environmental Programs and Management Account and $18 million under the State and Tribal Assistance Grants account for the Wetlands Protection Program for fiscal year 2001. Our recommendations reflect increases above the President request by $1.2 million and $3 million, respectively. The increased resources should be used to support public and private parties in their efforts to preserve and restore valuable wetlands. Further resources should also be used to expand the development and use of biological assessment tools.

Clean water act state revolving fund program

The Clean Water Act State Revolving Fund (CWASRF) is an important tool that states use to fund high priority water quality and wastewater treatment projects. While traditionally used to finance public wastewater treatment projects, some states are beginning to use their Funds to help finance public and private nonpoint source, wetlands, and estuary projects. This is a positive trend, given the magnitude of nonpoint source problems in freshwater and coastal systems. The loans from these Funds also allow entities like The Nature Conservancy to leverage resources to achieve bigger conservation gains.

For example, the CWASRF made possible an $8 million loan to The Nature Conservancy as part of a $13.6 million project. The project involved the purchase of 12,362 acres of ranch land in California's Cosumnes River watershed. The purchase protects rare springtime wetlands called vernal pools from increasing development pressures from agriculture, mining, and urban growth. To keep the land on the tax roll while also achieving conservation goals, The Nature Conservancy plans to resell much of the property to a ranching company subject to conservation easements to be held by the Conservancy and the Natural Resources Conservation Service.

The Nature Conservancy recommends an appropriation of $1.35 billion under EPA's State and Tribal Assistance Grants account for the CWASRF in fiscal year 2001. This recommendation reflects an increase of $550 million above the President's request. It is based on the knowledge that EPA and third party organizations have each documented funding gaps for wastewater infrastructure needs and for nonpoint pollution control; however, the request is tempered by concern that other EPA programs that conserve biodiversity also face funding constraints. Finally, the Conservancy strongly encourages expanded use of the CWASRF for nonpoint source, wetland and estuary-related projects.

Innovative community partnership program (formerly called the sustainable development challenge grant program)

The EPA's Innovative Community Partnership Program provides financial support to communities acting through partnerships to develop place-based solutions to local environmental, economic, and social problems. The program is unique in that it supports projects that offer environmentally and economically sustainable solutions over the long-term to address interrelated pollution concerns such as land and water pollution. This program goes where other EPA programs do not. It provides critical funding for new community efforts, and it leverages public and private resources to achieve holistic responses to interrelated and complex problems.

The Nature Conservancy supports the Administration's request of $4.8 million under the Environmental Programs and Management account for the Innovative Community Partnership Program. There is demonstrated demand for the program as evidenced by the numbers of proposals received by EPA under the former Sustainable Development Challenge Grant Program. For example, EPA received over 960 proposals totaling over $100 million in response to its fiscal year 1998 Request for Proposals. Assuming that only one-quarter to one-half of these proposals were viable would suggest a funding base of approximately $25 to $50 million (assuming the same cost across proposals). Given the competitiveness of the program and asso-

ciated costs to develop proposals, it seems reasonable to estimate need for this program based on the numbers of proposals previously received.

We have learned in our nearly 50 years of work that the key to conservation success lies at the local level. Moreover, our ecoregional and watershed-based work tells us that multiple tools must be available to truly minimize the threats to specific ecological systems and that the tools must be applied with an understanding of the connectivity between terrestrial and aquatic systems. This requires working at multiple scales within a landscape and with a consideration of all elements of the environment. Few EPA programs enable support for such important interrelated environmental and community-based work. We, therefore, urge Congress to provide funding for this important program.

CLOSING

Thank you for the opportunity to submit these remarks. Adequate protection of the environment is critical in the fight to conserve biodiversity. We recognize that the challenge is a daunting one, but we would not be investing so heavily with our own resources if we did not believe the cause to be both worthwhile and achievable. We look forward to continuing our work with Federal agencies, state and local governments, non-governmental organizations, and the private sector to ensure the long-term protection and sustainable use of the environment toward the ultimate goal of preserving the diversity of life on Earth. We appreciate congressional support for the EPA programs that help make this important work possible.

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. Environmental Protection Agency (EPA), particularly as it affects funding of water quality programs administered by the states.

STATE POLLUTION CONTROL GRANTS (SECTION 106)

The UMRBA enthusiastically supports the $45 million increase that the Administration has requested for Section 106 State Pollution Control Grants in fiscal year 2001. Of that increase, the five states of the Upper Mississippi River Basin would receive a total increase of $6.17 million, bringing the five-state Section 106 grants total to $18.5 million in fiscal year 2001. These federal funds, in combination with the states' own fund match, support the core state water quality programs including water quality monitoring and related laboratory costs, surface and groundwater standards, effluent limit calculations, NPDES permit issuance, and compliance and enforcement actions.

The 50 percent increase in Section 106 grant funding that each of the five basin states is scheduled to receive in fiscal year 2001 is critical. EPA is targeting this increase for state implementation of total maximum daily loads (TMDLs), including watershed characterization, training and data input support for computer modeling and related analyses, allocation of permissible loads, development of TMDL reports and plans, and public outreach and stakeholder involvement. The states have a variety of serious concerns about the TMDL guidance that EPA has recently proposed. Among other things, states' TMDL responsibilities have the potential to overwhelm state agency resources that are in many cases already strained. In fact, EPA and states are cooperatively developing a workload model in an effort to identify the gap in fiscal and staff resources for water program activities. This gap analysis has preliminarily determined that financial support for state programs must triple to adequately support the new TMDL requirements and meet the core program requirements. Regardless of how the most controversial provisions of EPA's TMDL guidance are ultimately resolved, TMDL planning and implementation promises to be a major challenge. Increases in funding to enable states to meet these challenges, as well as base program needs, is imperative.

CLEAN WATER STATE REVOLVING FUNDS

The UMRBA is deeply concerned about the lack of support in the Administration's fiscal year 2001 budget proposal for the Clean Water State Revolving Fund (CWSRF), which helps meet wastewater infrastructure needs. In contrast to fiscal year 2000 funding of $1.35 billion, the budget request for fiscal year 2001 is only

$800 million. Under such a reduced funding level, the five states of the Upper Mississippi River basin would experience a total cut of roughly $74 million or 41 percent.

EPA is proposing to allow states to reserve up to 19 percent of their CWSRF capitalization grants to make grants for nonpoint source projects. Although this new provision is designed to offer states increased flexibility, in a climate of decreased funding, it would have the effect of further decreasing the number of wastewater infrastructure projects that can be supported and would decrease the ability of SRFs to provide a continual source of loan funding for all projects. The high demand for nonpoint source water pollution project funding underscores the need to reauthorize CWSRF funding and increase annual federal appropriations to $2 billion.

STATE NONPOINT SOURCE GRANTS (SECTION 319)

The UMRBA strongly supports the Administration's request for a 25 percent increase of $50 million for state nonpoint source grants under Section 319 of the Clean Water Act. Such a funding increase will translate into a total of approximately $36.5 million for nonpoint source pollution activities in the 5 states of the Upper Mississippi River Basin. Nonpoint sources are one of the major causes of pollution in this basin's rivers and streams, which drain the country's agricultural heartland.

PREPARED STATEMENT OF THE WASHINGTON DRAMA SOCIETY, INC. T/A ARENA STAGE

Thank you for this opportunity for the Washington Drama Society Inc, T/A Arena Stage to submit a statement for the hearing record concerning fiscal year 2001 funding. The purpose of this statement is to:

—Provide the Committee a brief history of Arena Stage, its community engagement programming in Southwest Washington, DC, and its renown as a national performing arts organization; and,

—Present a $650,000 project proposal for your consideration under Title II—Department of Housing and Urban Development: Community Development Block Grants.

BACKGROUND

For five decades, Arena Stage has been the flagship for the American resident theater movement, bringing challenging works of great richness and diversity to communities both in Washington and abroad. The theater opened its doors at the corner of Sixth and Maine on the waterfront 40 years ago, and today more people attend Arena Stage than any other producing theater in the Washington region.

Recently, after many months of analysis for a proposed relocation to Washington's downtown cultural and entertainment district, Arena Stage decided to remain at the waterfront. Although keenly aware of Arena's recognition as a national treasure, the Board of Trustees believes the theater is firmly rooted in Southwest, a community bulldozed and rebuilt by urban renewal in the 1960s.

The theater's commitment to stay has been applauded by community, civic and business leaders who view Arena Stage as the "good neighbor" who can take the lead in sustainable community development. Therefore Arena is exploring ways in which it can help ensure that the area's disappointing urban development history is not repeated. Plans are to integrate Arena Stage's renovation and expansion plans into a comprehensive economic and cultural revitalization and development program in the Southwest, particularly in conjunction with the "Waterfront Revitalization Endeavor," the recent partnership between the District of Columbia and the Federal Government to create a new, energized waterfront.

Arena Stage's facilities plan will include: the renovation of its 820-seat arena theater; renovation of its 514 seat proscenium theater; a new 200-seat black box theater; expanded administrative offices, public spaces with lobby, concessions, and ticketing facilities; additions for rehearsal studios, production shops, dressing rooms, and storage; acquisition of actor and artist housing; parking improvements; and the critical addition of classrooms and meeting spaces.

Our renovation and expansion plans would not be complete without consideration for technological upgrading that enhances the total theater experience. Arena plans to transform its public and support spaces into a living, state-of-the-art interactive theatrical museum. Arena wants to offer its 300,000 visitors, which include students, adults, tourists and native Washingtonians, a complex, enriching experience off stage as well as on. Arena's technology and viewing galleries will serve as a

model for putting the craft and magic of theatrical art no further away than a button, a touch-screen, or a tour.

COMMUNITY ENGAGEMENT AT SIXTH AND MAINE

Community Engagement is the umbrella under which Arena's programming for education, audience enrichment and social outreach is managed. These three areas of arts concentration operate in tandem to create strong internal and external relationships between children and adults, patrons and artists, and the community and the Arena family at large through a series of programs that extend straight to the artistic core of the theater.

At present, Arena serves over 27,000 students through its Student Matinee and DC Ticket Exchange programs. In addition to these performance incentives, we offer educational programming comprised of an intense four-month, in-class arts immersion program, master classes, performance intensives and a student playwrights project. All of these arts education programs are offered off-site and in partnership with local area elementary-, middle- and high schools. Our audience enrichment programming includes an array of meet-the-artist events, a demonstration/lecture series, and regular interactive audience dialogues. Living Stage Theatre Company, located at 14th and T Streets, NW, for over 30 years, is Arena's critically acclaimed social outreach initiative which has provided programming to help transform the visions that youth and adults have of themselves in relation to their community through creative empowerment.

Renovation plans at Sixth and Maine pivot on our desire to better serve these students by expanding these community engagement activities. At present, no classrooms or meeting spaces exist on our main campus in the Southwest community. This frustrates the theater's strong desire to enrich our educational and social outreach services provided to Southwest area children and adults, especially given the reduced arts education programs in the schools. Community engagement activities could benefit from new and expanded on-site facilities. In addition to adding classroom and meeting room space in Arena's proposed new facility programming, duplicating the success of Living Stage Theatre Company in the Southwest community has become one of Arena's top priorities.

A MODEL FOR SOCIAL OUTREACH IN SOUTHWEST

Living Stage was founded in 1966 and later moved to the corner of 14th and T Streets, NW as Arena's professional social outreach program in the Shaw/Columbia Heights community of Washington, DC. Dedicated to the special needs of youth, and adults from under-served communities, Living Stage offers unique programs that integrate a deep respect and understanding for the needs of people living in difficult and sometimes dangerous circumstances with an equally deep appreciation for human creativity and the art of theater. Programs are intended to help audiences confront crucial social issues, explore creativity and imagination, and above all, build self-esteem and resiliency. By encouraging the imagination of their audiences, Living Stage seeks to empower them to express themselves and to gain the self-confidence to explore new solutions to real life problems.

Living Stage has achieved an international reputation for artistic excellence and has been the recipient of numerous honors and awards for its programming success. Duplicating Living Stage's successful model in the Southwest is a natural segue for Arena as it assumes the mantel of leadership in the revitalization of the community in which it has operated its main campus for 40 years. In conjunction with community and business leaders and the Mayor's Office of Planning for revitalizing Southwest and the waterfront community, Arena will be exploring the merits of duplicating the Living Stage model at Sixth and Maine (or a site nearby,) and will examine the implications of its additional programming.

ARENA AS PARTNER AND NEIGHBOR

Arena's initial planning and conceptual design for its overall renovation and expansion program has been conducted with a mindful eye towards both the theater's artistic mission and its responsibility as a "good neighbor." By integrating our renovation and expansion planning into a comprehensive waterfront revitalization program, Arena looks forward to assuming a leadership role in energizing this historic community development program. In so doing, we will be fully supporting the March 22, 2000, Memorandum of Understanding (MOU) between the Federal and District of Columbia Governments which outlines the agreement of numerous departments and agencies "to create a new partnership that will help attain a vision for the waterfront areas." Arena's plans to work in concert with the parties identified in the MOU affirm our commitment to be "of" the community as well as "in" it.

FISCAL YEAR 2001 PROGRAM PROPOSAL

Approximately $40 million must be raised from government, foundation, corporate and individual sources to successfully make the vision outlined above a reality for Arena Stage in the waterfront. But in recognizing the necessity, and in offering our pledge, to work in partnership with the District of Columbia and the Federal Government for the Waterfront Revitalization Endeavor, it becomes apparent that our planning, design and construction schedule will be contingent upon the City's and the Federal Government's timetables. These timetables and the expanded planning efforts will create extra costs for Arena.

Arena Stage therefore requests that $650,000 be allocated in the 2001 fiscal year Appropriations Budget for the planning, conceptual design and project development portion of the costs for Arena Stage's renovation and expansion project—the planning phase being the first essential, and most costly, step in the process. Funding to support these one-time non-recurring expenses will also assist us in addressing a substantial amount of our building's deferred maintenance as well as our growing administrative, technical production, audience and educational needs.

CONCLUSION

Artistic Director Molly Smith's vision, which I fully support, is to produce huge plays of all that is passionate, exuberant, profound, deep and dangerous in the American spirit by creating a vibrant emotional and intellectual theatrical landscape through storytelling and through community engagement, civic dialogue and genuine communication. Arena's decision to stay in the community and to renovate and expand its main campus facility at its present site is not only an affirmation by our Board of Trustees and staff to support this vision, but is also a strong statement about Arena's commitment to neighborhood preservation and restoration.

As an anchor institution and stakeholder in what happens in Southwest, Arena recognizes its role as an educational and social outreach resource as well as a contributor to the enhancement of visitor participation in cultural arts activity along Washington's greatest natural asset, its waterfront. Assuring a bright and vigorous future for Arena Stage means assuring a bright and vigorous future for the shoreline neighborhood in which it is firmly fixed.

Funding to get our project off the ground through a Congressional appropriation in the Fiscal 2001 Budget is a vital first step if Arena Stage is to realize its full potential as a partner in the Waterfront Revitalization Endeavor.

Thank you again for this opportunity to submit this statement for the hearing record.

PREPARED STATEMENT OF THE NORTHWEST INDIAN FISHERIES COMMISSION

Mr. Chairman, and Honorable Members of the Committee, I am Billy Frank, Chairman of the Northwest Indian Fisheries Commission (NWIFC) and on behalf of the tribes in the state of Washington I would like to thank you for the opportunity to provide testimony concerning the Environmental Protection Agency's (EPA) fiscal year 2001 appropriations.

We are specifically requesting that you earmark $700,000 within EPA's Clean Water Act Section 104(b)(3) program for the tribes in Washington State, through the Northwest Indian Fisheries Commission, for the purpose of maintaining an existing and successful mechanism for inter-governmental cooperation. Further, we request that Congress directs the agency to incorporate this amount into NWIFC and tribal base level funding for future years.

The purpose of our request is to continue implementation of the model Coordinated Tribal Water Quality Program (CTWQP) for twenty-six participating tribes and tribal organizations in the state of Washington for fiscal year 2001. This program, has provided a forum for continuous and meaningful communication between tribal, state and federal agencies for a decade. Strong congressional support for implementation of this tribal initiative began in 1990, and is present today.

However, we are losing ground in the implementation of these efforts. In recent years Congress has been very responsive to tribal environmental protection issues through unprecedented increases in the Environmental Protection Agency's General Assistance Program (GAP) for tribes. Paradoxically, the reality here in EPA Region 10 is that the number of tribes eligible for GAP funding far outpaces the availability of dollars. In fact, during this remarkable time of growth in EPA Indian Programs, the tribes in the state of Washington are actually experiencing a reduction in their program dollars. Erosion of base level funding is jeopardizing the federal govern-

ment's long-term investment of this efficient and effective water quality protection program.

The intent of this testimony and funding request is to bridge the shortfall in these EPA funds and maintain this important and successful tribal initiative by:

—Stabilizing the EPA base funding level at each of the twenty-six participating tribes; and

—Maintaining centralized program coordination at the Northwest Indian Fisheries Commission.

Support for this model tribal initiative is timely, as it implements the goals and objectives of the President=s Clean Water Action Plan. It is an existing program that centers around watershed-based water quality protection by building partnerships, and fostering inter-jurisdictional cooperation. It is a critical component in the protection and restoration of our northwest salmon and shellfish.

Justification for this funding request is based on:

—Legal rights and obligations of the federal government to protect the treaty-reserved rights of the tribes;

—The United States' trust responsibility to protect the health and environment of the tribes on a government-to-government basis;

—Cost effective use of a cooperative inter-governmental strategy to accomplish national clean water goals; and,

—The minimization of conflict between multiple jurisdictions who manage water quality.

To assist the Committee Members, I would like to summarize background relevant to our request.

BACKGROUND

The NWIFC request is made on behalf of our nineteen (19) member treaty fishing tribes, the Hoh, Chehalis, and Shoalwater Bay tribes in western Washington, and the Yakima Indian Nation, Colville Confederated, Spokane, and Kalispel Tribes in eastern Washington. The funding request is to continue implementing the model Coordinated Tribal Water Quality Program that began in 1990.

Washington State has been blessed with bountiful rivers and streams. Five species of Pacific salmon and three species of anadromous trout use streams in the state of Washington during the fresh water stages of their life cycles. Historically, there were ample supplies of fish for ceremonial, subsistence, commercial and recreational purposes. Old growth conifer removal, riparian zone impacts, farming activities, and channelization of the streams has reduced the productive capacity of these streams to extremely low levels. Currently, there are Puget Sound salmon stocks listed under the Endangered Species Act.

In 1979, the United States Supreme Court re-affirmed the treaty tribes—right to catch half of the harvestable number of anadromous fish passing through tribal usual and accustomed areas. In 1980, the Federal District Court held that the United States and the state of Washington must not permit degradation of fish habitat which would diminish the treaty harvest right. This decision specifically included degradation by point and non-point pollution. The federal courts have recognized that protection of water quality and other attributes of fish habitat are necessary to secure the Constitutionally-protected rights of the tribes to harvest fish.

The sovereign authorities of the Tribes and the legal principles enunciated in United States v. Washington and other federal court decisions support tribal involvement with both on and off- reservation environmental issues. The federal court decisions recognized the tribes as Aco-managers@ of the fish resource and water quality in our state. As co-managers in Washington, the tribes must have the resources to adequately participate in environmental protection programs.

The EPA Indian policy (1984) of working with federally recognized tribes on a government-to-government basis concerns more than 375 Indian tribes in the lower 48 states which control more than 52 million acres of land base. In our state, tribal reservations make up approximately six percent (6 percent) of the state of Washington. Our tribes have also retained usual and accustomed fishing grounds that include most of the state of Washington.

The combined area of Indian reservations nationally is larger than all of New England, yet EPA now devotes only a tiny fraction of its personnel and funds to environmental protection for the tribes. This is clearly a discriminatory prioritization of federal funds. On a national level, tribal reservations represent three percent (3 percent) of the land base of this nation. Although the EPA has worked closely with the states to implement adequate environmental programs, little has been done, until recently, to accomplish the same for the tribal governments. Indian tribes are over two decades behind the states both in resources received from the EPA and

in technical assistance provided by the EPA in developing tribal water program offices. A Afront end@ investment will promote cooperation and increased tribal involvement in environmental protection, as has been the case between the EPA and state governments for the past 20 years. The Coordinated Tribal Water Quality Program enables and fosters cooperative inter-jurisdictional partnerships.

We recognize, support, and appreciate the successful efforts that have been made to improve EPA Indian Programs and tribal funding. Our request for additional funding is intended to stabilize existing program implementation activities. Clearly, a means must be found to support the long term funding of tribal programs that seek to protect tribal treaty rights, their waters, and their peoples, or the efforts being made by EPA will not continue to be successful.

TRIBAL/STATE ROLES

Beginning in 1990, the state of Washington supported tribal involvement in environmental protection, both off and on-reservation. The state is committed to work with the tribes on a government-to-government basis as Aco-managers@ of the water resource in the implementation of this program. The federally recognized Indian tribes in our region have a long legacy of working cooperatively with the state of Washington. The intent to foster that kind of relationship was articulated in the Centennial Accord with Governor Gardner in 1989 and was recently re-affirmed with Governor Locke in the 1999 Leavenworth Agreement. The water quality protection efforts supported by EPA funding are part of sustaining that kind of inter-governmental cooperation.

The Coordinated Tribal Water Quality Program, an EPA/Tribal partnership, has generated successful models of state/tribal inter-jurisdictional cooperation. Examples of these models are:

—the Tribal Water Quality Standards Template, which encourages inter-governmental uniformity and coordination of water quality management, and

—the Clean Water Act 19303(d) Cooperative Management Program, which provides a forum for state/tribal government-to-government relations throughout the CWA 19303(d) listing and implementation process.

The tribes must be part of the solutions to prevent and control water pollution in the state of Washington. The tribes must participate in these activities to protect their governmental interests and treaty-protected fishing rights. In this time of existing and pending listings of salmon stocks under the Endangered Species Act, neither we, nor the resource, can afford to lose programs integral to our inter-governmental cooperative watershed program. The Coordinated Tribal Water Quality Program is part of protecting our nation's environmental heritage.

For the past decade, Congress has recognized and supported the Coordinated Tribal Water Quality Program by appropriating funding to maintain its operation. Even with the increased EPA General Assistance Program tribal set aside, tribes in the state of Washington are in danger of losing this successful tribal water quality initiative. This model program demonstrates how tribes can develop environmental programs and work with EPA to realize its long-range objective of including tribal governments as partners in decision-making and program management of tribal lands and resources.

We appreciate the difficulty Congress is facing in making decisions for this next fiscal year. In the case of the EPA, Congress and the Administration will probably direct their resources to address those areas of highest risk to human health and the environment. Therefore, we want to reiterate that tribal reservations and protection of their treaty resources have not been adequately addressed for the past twenty years and thus represent the highest of risks to this nation. Failure to acknowledge this would represent environmental genocide to Native Americans.

Sufficient and permanent funding is necessary to continue the tribal cooperative program. Certainty of funding is necessary for the tribes to hire permanent and professional staff to implement this program. Without an ongoing investment by Congress much of the good that has been accomplished to date will be lost.

Please consider our request for $700,000 for the Washington State Tribal Water Quality Initiative. Once again, thank you for the opportunity to provide testimony. Thank you also for your support in developing a national model, which demonstrates the ability of tribal governments to address environmental protection priorities through cooperative watershed processes with state and local governments.

Thanks to this Committee, we are making significant progress, and initiative is being supported at all levels. We hope that you and the Committee will continue to look favorably on our request.

PREPARED STATEMENT OF THE MICKEY LELAND NATIONAL URBAN AIR TOXICS RESEARCH CENTER

The Mickey Leland National Urban Air Toxics Research Center is requesting a $2.5 million appropriation for fiscal year 2001 to continue the air quality research on air toxics in urban areas as directed by the U.S. Congress. The Leland Center is a 501(c)(3) institution, which was authorized by Congress in the Clean Air Act Amendments of 1990 (Title III, Section 301 (p)).

The Leland Center has been operational for seven years and receives EPA assistance awards based upon Congressional appropriations. We leverage these federal funds with private sector funding, with industrial firms being the major contributors. NUATRC has a small staff and utilizes an administrative services agreement with The University of Texas-Houston Health Science Center in the Texas Medical Center complex. This arrangement allows the Leland Center to take advantage of the world-renowned scientific community at The University of Texas and the Texas Medical Center, as directed by Congress.

The Leland Center's mission is to sponsor and direct sound, peer-reviewed scientific research on the human health effects of air toxics in urban populations. It is an integral part of the air toxics strategy designed by Congress to assess the risks posed by these materials in susceptible groups of individuals living in areas where air quality concerns have been expressed by both medical and scientific experts and urban community leaders.

The NUATRC is governed by a nine-member Board of Directors, appointed pro rata by the Speaker of the U.S. House of Representatives, the Majority Leader of the U.S. Senate, and the President of the United States. In turn, the Board appoints a 13-member Scientific Advisory Panel, selected from national research institutions, academic centers and private sector scientists. The current membership of both the Board of Directors and the Scientific Advisory Panel is carried in Attachment 1.

The NUATRC's research program has grown significantly over the past several years to the point where nine research projects are being carried out, primarily focused on human personal exposures to air toxics, and more recently, on the noncancer health effects of selected air toxics. We are planning a major initiative in 2000 to explore the role of certain air toxics in asthma exacerbation in children. Our work on personal exposures has gained national recognition in the scientific and private sector communities and the U.S. Environmental Protection Agency, as witnessed by a major scientific workshop just concluded in early March, in which recent progress and future research planning in the air toxics personal exposure research field were addressed. The agenda for this meeting is carried as Attachment 2 to this testimony. The workshop entitled, "The Role of Human Personal Exposure Assessment in Determining Health Impacts of Urban Air Toxics", was attended by personal exposure experts, both nationally and internationally. It advanced the knowledge base on such studies and pointed to new research directions to better understand the human personal exposure/health effects area.

We believe that the Center's research program, as discussed below, meets Congressional intent to gather sound scientific data to address the public health risk from air toxics in urban areas, to allow more cost-effective risk strategies and management by federal and state regulators.

NUATRC RESEARCH PROGRAM

Personal Exposure

The NUATRC will soon complete two major air toxics research studies, one at the Environmental and Occupational Health Sciences Institute (EOHSI) in New Jersey, and the other at Columbia University in New York City.

Adults and children are included in the EOHSI study, which is testing the hypothesis that outdoor sources of air toxics influence indoor air and personal exposures in urban areas. The results suggest that indoor air plays an important role in daily human exposures to air toxics and indeed may be the predominant exposure route. Such data may cause a rethinking of the regulatory and risk management strategies employed for these materials. This work represents the NUATRC's first major field study, and has drawn considerable interest from the regulators and the regulated community. One hundred homes each in Elizabeth, New Jersey, Houston, Texas, and Los Angeles, California are included in the EOHSI work. Volatile hydrocarbons (VOC), aldehydes and air toxics on fine particles are the major targets of the EOHSI study.

The Columbia University study will contrast air toxics (VOC's, aldehydes and air toxics on fine particles) in two urban high-school populations in New York City and Los Angeles, with the important variables including city-specific and seasonality differences. This study is expected to provide descriptive exposure data for minority

children in the central core neighborhoods in the two largest urban areas in the U.S. Early results suggest similar findings to those in the EOHSI study. The outcomes of both studies are eagerly anticipated by the scientific community. EPA's directions for future research and regulatory control strategies are dependent to a large degree on the relative indoor and outdoor exposures to air toxics experienced by people living in urban areas.

Another important exposure initiative is the NUATRC's participation in the Center for Disease Control/National Center for Health Statistics' NHANES Program (National Health and Nutrition Examination Survey). For the first time, a non-federal entity, NUATRC, is involved in gathering data on personal exposures to air toxics in a representative sample of the U.S. population, to augment the public health data (blood pressure and content, TB test, etc.) being obtained in this massive federal study. This is the first time that NHANES will include environmental data on personal exposures to selected air toxics in a statistically meaningful number of U.S. citizens in a nationwide distribution. Coupling these field exposure data with CDC/NCHS data on health parameters of the same individuals offers real promise in addressing the impact of air toxics on public health.

Health Effects

In the health effects area, NUATRC has started two new studies to address the role of air toxic metals on fine particles in respiratory and cardiovascular responses. These studies, at Harvard and Washington State Universities, will hopefully allow us to move directly into more comprehensive exposure and health outcome research programs. The work at Harvard is directed at relationships between occupational exposures of boilermakers and cardiopulmonary problems with the goal of moving further toward similar environmental exposures. The health studies at Washington State University are environmentally-oriented toward respiratory effects in the population from exposure to air toxics metals. Both are epidemiological studies from which future personal exposure/health effect field studies can be developed.

Particle Monitor for Air Toxics

The Leland Center is currently funding the development of a new generation of particulate matter (PM) personal monitor to improve our ability to assess personal exposure to the air toxics that are carried on fine particulate matter. These include metals and semi-volatile organics, many of which are suspected of presenting health risks. This new monitor and pump system will take two years to develop and will be lightweight, user-friendly, and technically advanced. The Leland Center is the first institution to sponsor this type of technology development for personal exposure studies. Once completed, the new monitor will enable larger scale population exposure studies, will be a major contribution to particulate matter research and will enable air toxics risk assessments to be more accurate and realistic. The initial phase of the air toxic particle sampler development will be conducted in 2000, with completion in 2001.

Small Grants

The Leland Center has also undertaken two small grants for new investigators, which foster the development of short-term research projects on air toxic exposures and health effects by "new" investigators; i.e., those scientists without long research experience and who perhaps might not have resources to carry out larger studies, but whose ideas and community involvement may prove useful. These studies are usually less expensive than full research designs, but will allow testing of new research hypotheses in a cost-effective manner. One such study at the University of Illinois at Chicago deals with polycyclic hydrocarbons in indoor environments. The other program at Johns Hopkins University is directed at hydrocarbon air toxics in an industry-impacted urban community in Baltimore.

The most recent research initiative that the NUATRC is planning is an effort to understand asthma exacerbation in school children as a function of the presence and level of oxygenated air toxics in the atmosphere. We are seeking funding from other federal agencies and foundations for support of this effort, which springs from an earlier NUATRC investigation which concluded that oxygenated hydrocarbons and metals on fine particles were the most likely air toxics to impact and worsen asthma. As we all realize, asthma is a most important emerging respiratory disease, especially among inner city children. We are not including support for this study in this appropriations request.

ALTERNATIVE RESEARCH SUPPORT

In developing its research program, NUATRC interacts with other research organizations and public and private institutions to ensure that the Leland Center's re-

search builds upon previous research, does not duplicate research of others, and leverages both financial and scientific resources. NUATRC has interacted with the National Center for Health Statistics, the National Institute for Environmental Health Sciences, the Environmental Protection Agency, the Health Effects Institute, and the Center for Air Toxics Metals Research and a number of corporations to assess critical research needs.

NUATRC has made a priority of leveraging its research monies by working with other funding sources and institutions, to allow more comprehensive and cost-effective studies. For example:

—Research at EOHSI, after being initiated by NUATRC, is now funded in part by the Health Effects Institute in Cambridge, Massachusetts
—The NHANES Program is funded primarily by the National Institutes of Health and the National Center for Health Statistics
—The health studies at Harvard and Washington State Universities are also being leveraged by support from NIEHS and EPA, respectively.
—The research initiative on asthma and air toxics is part of a large, comprehensive air quality study to be funded primarily by U.S. EPA.

NUATRC believes strongly that bringing additional resources, both scientific and financial, to these research investigations, allows federal resources to be used more cost-effectively, and brings additional expertise to the design and interpretation of the results.

ADMNISTRATION

The Leland Center operates with a very small administrative staff of four full-time employees, one consultant, and important in-kind support from The University of Texas Medical School. Our staff are all employees of The University of Texas, which obviates the need for considerable personnel support and allows us the benefit of residence at The University, providing important scientific and administrative benefits, including access to Medical School and School of Public Health faculty. We are proud of the high rate of monies spent directly on research compared to administrative costs. We have enjoyed a ratio of about 70:30, which is greater than many similar institutions, and we continue to strive for additional economies.

BUDGET

Our request for $2.5M in appropriated monies in fiscal year 2001 is based on the following items:

Population-based air toxics exposure	$400,000
Collaboration with NHANES	125,000
Health Effects Research	400,000
Particle Monitor for Air Toxics	150,000
Small Grants/Workshops	175,000
Personal Monitor Validation Studies	150,000
Administration	750,000
Emergency Response	150,000
Exploratory Research	200,000
Total	2,500,000

PREPARED STATEMENT OF TEXAS A&M UNIVERSITY

Mr. Chairman and members of the Committee, I am Ed Hiler, Vice Chancellor for Agriculture and Life Sciences in the Texas A&M university system. I appreciate the opportunity to appear before you today, to describe a few exciting research projects we have underway, and to ask for your support for continued federal funding. New technology is the life blood of American agriculture. With the 1996 Farm Bill and resulting phase down in federal farm programs, it is imperative that research continues providing a technological underpinning for agriculture. Today, I will describe several examples of how we can provide this underpinning.

CONSORTIUM FOR AGRICULTURAL SOILS MITIGATION OF GREENHOUSE GASES (CASMGS)

A consortium of eight Land Grand universities, federal agencies, and a private-public research laboratory seeks funds to develop and verify scientifically defensible methods to measure and estimate the effects of soil conservation and crop management practices on carbon sequestration in agricultural soils. The consortium will also assess the economic and environmental consequences of programs designed to

sequester atmospheric carbon dioxide in agricultural soils. We are requesting funding of $5,000,000 from EPA for this project for fiscal year 2001.

AGRICULTURE AND THE ENVIRONMENT—LANDSCAPE ISSUES

The focus of the Texas Institute for Applied Environmental Research is on agriculture and the environment. Funding for this initiative will be used to continue development of (1) conceptual approaches that can be used to resolve environmental problems in agriculture while maintaining the competitiveness of the industry, (2) modeling tools that analyze policy alternatives to determine their effectiveness in achieving environmental objectives and their economic impacts on the targeted industry, and (3) implications of smart growth initiatives on production agriculture. We are requesting funding for this project from EPA at $750,000 for fiscal year 2001.

AGRICULTURAL AIR QUALITY

The Texas A&M University System and the University of California at Davis propose to establish a national program for research and technology transfer of methodologies that can be used by agricultural producers, processors, and managers of Concentrated Animal Feeding Operations to economically comply with air pollution regulations mandated by the Federal Clean Air Act (FCAA) and required by State Air Pollution Regulatory Agencies (SAPRAs). The goal of this initiative will be a reduction of public exposure of pollutants from agricultural operations while minimizing the economic burden on managers of agricultural operations. We are requesting funding for this project from EPA at $1,000,000 for fiscal year 2001.

NASA TECHNOLOGY FOR AGRICULTURE

Appropriations are sought to adapt existing NASA technologies to create products and services that will increase the profitability and sustainability of U. S. agriculture. A cooperative relationship has been established among NASA, the Texas A&M University System, and agribusinesses to identify critical problems limiting the profitability of agricultural industries, determine whether NASA has developed technologies that could be used to overcome those problems, adapt appropriate NASA technologies to the needs of agriculture, and assist private enterprise to commercialize adapted technologies. We are requesting increased funding for NASA to support this project at $5,000,000 for fiscal year 2001.

ECONOMICALLY & ENVIRONMENTALLY SOUND RICE PRODUCTION AND MANAGEMENT IN THE U.S.

Privately held rice lands provide several societal and ecological benefits. Rice has an annual impact of about $13 billion on the economy of the U.S., and represents the economic, social, and environmental underpinning of major sections of the Gulf Coast. Rice production in these soils provides several environmental benefits, including wildlife habitats, water filtration through wetlands, and flood protection. Federal support is needed to identify and place values on ecological services provided by rice production and to design and evaluate technologies and policies that increase these public benefits while improving the industry's economic viability. We are requesting funding from EPA for this project at $1,000,000 for fiscal year 2001.

PREPARED STATEMENT OF AMERICAN RIVERS

Mr. Chairman and Members of the Appropriations Subcommittee on VA–HUD-Independent Agencies, on behalf of more than 450 conservation and recreation organizations, community groups, religious affiliations, companies, and other groups across the country, American Rivers would like to thank you for the opportunity to testify.

We urge you to support increased funding for Environmental Protection Agency's Office of Water programs that play a critical role in the health of many rivers across the nation and the communities that depend upon them. Specifically, we urge you to increase funding for Total Maximum Daily Load provision of the Clean Water Act and the Fish Passage Workgroup.

Total Maximum Daily Loads (TMDLs).—We urge you to create a $400 million line item in your appropriation for EPA's State Program Management Grants (Section 106 of the Clean Water Act) for grants to states for TMDL development and implementation in fiscal year 2001. The TMDL provision is one of the most powerful tools the federal government has to reduce water pollution. The TMDL provision—unique because it addresses pollution regardless of its source—requires states to identify

and rank waters that do not meet or are not expected to meet state water quality standards and to develop cleanup plans (TMDLs) to correct the water quality violations.

According to EPA, there are on average at least 300 impaired water bodies in every state in need of a TMDL. To meet this need, Congress should create a $400 million line item for grants to states for TMDL development and implementation to help create an accounting system for watershed restoration across the nation.

Fish Passage Workgroup.—We urge you to appropriate sufficient funds for the Chesapeake Bay Program so that EPA can allocate $800,000 for the Fish Passage Workgroup. This program works to reopen the Bay's blocked tributaries to provide access to important habitat for migratory fish. Some 2,500 blockages on the Bay's tributaries, along with excessive harvesting, have reduced annual harvests of Bay shad from 17.5 million to less than 2 million pounds in this century, crippling an important seasonal industry.

The Fish Passage Workgroup.—which includes members from the District of Columbia, Maryland, Pennsylvania, Virginia, EPA, the National Marine Fisheries Service, and the Chesapeake Bay Foundation—has made great strides towards restoring fish populations by constructing fish passage facilities; breaching, notching, or removing dams; and rebuilding highway culverts. Restoring the Chesapeake Bay's fisheries will have a significant economic impact on the region. According to the Fish and Wildlife Service, healthy fish populations in the Bay and its tributaries would generate $10–30 million a year in shad sport fishing alone. We urge you to appropriate sufficient funds for the Chesapeake Bay Program so that EPA can allocate $800,000 for the Fish Passage Workgroup.

PREPARED STATEMENT OF THE AMERICAN PUBLIC POWER ASSOCIATION

The American Public Power Association (APPA) is the service organization representing the interests of the more than 2,000 municipal and other state and locally owned utilities throughout the United States. Collectively, public power utilities deliver electric energy to one of every seven U.S. electric consumers (about 45 million people) serving some of the nation's largest cities. The majority of APPA's member systems are located in small and medium-sized communities in every state except Hawaii. We appreciate the opportunity to submit this statement concerning fiscal year 2001 appropriations for programs under this Subcommittee's jurisdiction.

CLEAN AIR PARTNERSHIP FUND

APPA supports funding of the Clean Air Partnership Fund at the level of $85 million in fiscal year 2001 (Administration's request). As locally-owned providers of electricity to nearly 45 million consumers across the country, we are strongly interested in pursuing projects that benefit the environment. Along with the states, local governments, business and the environmental community we lend our enthusiastic support for this program that offers an innovative approach to addressing multi-pollution problems in a cost-effective way. The fund would help finance environmental technologies and environmentally related energy technologies and programs.

We believe at an adequately funded level, the Clean Air Partnership Fund could become a significant incentive available to locally owned, not-for-profit electric utilities to make new investments in renewable and clean energy projects. Such projects have the potential of providing important economic and environmental benefits to the communities served by the municipal utility. Along with significant air quality benefits resulting from accelerated use of emissions-free energy sources, new jobs are created each time these technologies are deployed.

Among other projects, we would look to the Fund to spur development of landfill gas-to-energy projects. These projects are valuable in reducing methane gas emissions. As municipally owned electric utilities, we have unique opportunities to partner with cities and the landfills they operate.

GREEN LIGHTS PROGRAM

The Green Lights program encourages use of energy efficient lighting to reduce energy costs, increase productivity, promote customer retention and protect the environment. Program partners agree to survey lighting in their facilities and to upgrade it, if cost-effective. Environmental benefits result from more efficient energy use and from reductions in emissions of carbon dioxide, sulfur dioxide and nitrogen dioxide, thus improving air quality. EPA provides program participants public recognition and technical support. Both large and small APPA member systems participate in this program including City Utilities of Springfield, MO; Concord Municipal

Light Plant, MA; City of Georgetown, TX; Grant County Public Utility District, WA; Gray's Harbor County PUD, WA; Greenville Utilities Commission, NC; Indiana Municipal Power Authority, IN; Los Angeles Department of Water & Power, CA; Mason County PUD, WA; New York Power Authority, NY; Norwood Municipal Light Department, MA; Omaha Public Power District, NE; Orlando Utilities Commission, FL; Port Angeles City Light Department, WA; Puerto Rico Electric Power Authority, PR; Sacramento Municipal Utility District, CA; City of St. Charles Electric Utility, IL; Salt River Project, AZ; Virgin Islands Water & Power Authority, VI; Springfield Utility Board, OR, and Taunton Municipal Lighting Plant, MA.

ENERGY STAR PROGRAMS

A number of EPA's Energy Star programs build on the successes of Green Lights. These important EPA programs are examples of successful public/nonpublic partnerships that promote the use of profitable, energy-efficient technologies as a way to increase profits and competitiveness while at the same time minimizing pollution. They include Energy Star Buildings, the Energy Star Transformer Program, Energy Star office equipment and the Residential Energy Star Program. APPA member systems participate in and support EPA's Energy Star efforts.

LANDFILL METHANE OUTREACH PROGRAM

The Landfill Methane Outreach Program provides environmental benefits by encouraging utilities to make use of landfill gas as an energy source. Several APPA member systems participate in this program, including Illinois Municipal Electric Agency, IL; Jacksonville Electric Authority, FL; Emerald People's Utility District, OR; Los Angeles Department of Water and Power, CA, and Orlando Utilities Commission, FL. Utilities voluntarily agree to take advantage of the best opportunities to use landfill gas in generating power. EPA recognizes and publicizes the utility's efforts and provides technical assistance. One of the success stories cited by EPA occurred with APPA member system Emerald People's Utility District in Eugene, OR. This public power utility worked collaboratively with the State of Oregon, Lane County officials and a private investment company to develop a 3.4 MW plant at the Short Mountain Landfill. EPUD's general manager says landfill energy recovery is like "turning straw into gold," providing additional revenue to EPUD as well as a fee to the county.

COUNCIL ON ENVIRONMENTAL QUALITY (CEQ)

APPA supports the Administration's fiscal year 2001 budget request of $3,020,000 for the Council on Environmental Quality (CEQ). As units of local government APPA member utilities have a unique perspective on environmental regulation. Public power utilities and others from industry have experienced a general lack of consistency in federal environmental regulation. While additional layers of government should be avoided, a central overseer can perform a valuable function in preventing duplicative, unnecessary and inconsistent regulations. The council is responsible for ensuring that federal agencies perform their tasks in an efficient and coordinated manner. For these reasons, APPA supports the existence and continued operation of CEQ.

Again, APPA member systems appreciate your consideration of our views on priority appropriations issues for fiscal year 2001.

PREPARED STATEMENT OF METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

I am Terrence J. O'Brien, President of the Metropolitan Water Reclamation District of Greater Chicago, and on behalf of the Water Reclamation District, I want to thank the Subcommittee for this opportunity to present our priority for fiscal year 2001, and express our appreciation for your support of our requests over the years. The Metropolitan Water Reclamation District (District) is the sponsor for the federally approved combined sewer overflow (CSO) project, the Tunnel and Reservoir Plan (TARP), in Chicago, Illinois. Specifically, we are asking that $10 million be included to continue construction of this Environmental Protection Agency-sponsored project in the Subcommittee's VA, HUD and Independent Agencies Appropriations Bill for fiscal year 2001. The following outlines the project and the need for the requested funding.

INTRODUCTION

The District was established in 1889 and has the responsibility for sewage treatment, and is also the lead agency in providing sponsorship for flood control and stormwater management in Cook County, Illinois. In fact, the District was established in response to an epidemic, which killed 90,000 people in 1885. By 1900, the District had reversed the flows of the Chicago and Calumet Rivers to carry combined sewage away from Lake Michigan, the area's main water supply. The District has been involved with major engineering feats since its inception.

In an effort to meet the water quality goals of the Clean Water Act, to prevent backflows into Lake Michigan, and to provide an outlet for floodwaters, the District designed the innovative TARP. The TARP tunnels, which were judged by the Environmental Protection Agency (EPA) on two occasions as the most cost-effective plan available to meet the enforceable provisions of the Clean Water Act, are a combined sewer overflow elimination system. The TARP reservoirs, also under construction, will provide flood control relief to hundreds of thousands of residents and businesses in the Chicagoland area.

TUNNEL AND RESERVOIR PLAN

The TARP is an intricate system of drop shafts, tunnels and pumping stations which will capture combined sewer overflows from a service area of 375 square miles. Chicago will remove three times the amount of CSO pollution as Boston's projected removal—for approximately the same cost. The remaining Calumet tunnel system will provide 3.1 million pounds of biological oxygen demand (BOD) removal versus Boston's one million pounds of BOD removal per year. In fact, Chicago's CSO pollution problems are worse than the combination of Boston, New York, and San Francisco's pollution problems. The Chicago Metropolitan Area's annual BOD loading is 43 million pounds per year. This contrasts with the combination of Boston, New York and San Francisco's combined annual BOD loading of 35 million pounds.

A good portion of the remainder of the TARP system is to be built in the southeast side of Chicago and the southern suburbs (Calumet system), a low-income, highly neglected and highly polluted area. This community suffers from tremendous land, air and water pollution—literally a dumping ground for multi-media pollution ranging from chemical waste to serious water pollution.

Due to the enormous risk to the community, the District as the local sponsor cannot afford to leave the citizens vulnerable. Therefore, it is imperative that this work must continue. Because the construction industry is already doing work in the area, the climate is favorable for proceeding with this work at this time, producing significant cost savings. What we are seeking, then, is funding to advance federal work.

We have a proven and cost-effective program. In fact, we have estimated that TARP's cost is about a quarter of the cost of separating the area's existing combined sewer systems into separate sewage and stormwater systems. Upon reanalysis, the EPA has consistently found the TARP program to be the most cost-effective solution that will reduce the impacts by the greatest degree to meet the enforceable requirements of the Act, with the least amount of dollars. The project, while relating most specifically to the 52 tributary municipalities in northeastern Illinois, is also beneficial to our downstream communities such as Joliet and Peoria. These benefits occur because of the capture of wastewater in the tunnels during the storm periods and by treatment of the discharge before being released in to the waterways.

Since its inception, TARP has not only abated flooding and pollution in the Chicagoland area, but has helped to preserve the intergrity of Lake Michigan. In the years prior to TARP, a major storm in the area would cause local sewers and interceptors to surcharge resulting in CSO spills into the Chicagoland waterways. Since these waterways have a limited capacity, major storms have caused them to reach dangerously high levels resulting in massive sewer back-ups into basements and causing multi-million dollar damage to property. To relieve the high levels in the waterways during major storms, the gates at Wilmette, O'Brien, and the Chicago River would be opened and the excess CSOs would be allowed to backflow into Lake Michigan. Since the implementation of TARP, some backflows to Lake Michigan have been eliminated. After completion of both phases of TARP, all backflows to Lake Michigan will be eliminated.

Since implementation of TARP, 358 billion gallons of CSOs have been captured by TARP, that otherwise would have reached waterways. After the completion of both phases of TARP, 99 percent of the CSO pollution will be eliminated. The elimination of CSOs will result in less water needed for flushing of Chicago's waterway system, making it available as drinking water to communities in Cook, DuPage, Lake and Will counties, which have been on a waiting list. Specifically, since 1977, these counties received an increase of 162 mgd, partially as a result of the reduction

in District's discretionary diversion in 1980. Additional allotments of Lake Michigan water, beyond 1991, will be made to these communities, as more water becomes available from sources like direct diversion.

With new allocations of lake water, communities that previously did not get to share lake water are in the process of building, or have already built, water mains to accommodate their new source of drinking water. The new source of drinking water will be a substitue for the poorer quality well water previously used by these communities. Partly due to TARP, it is estimated by IDOT that between 1981 and 2020, 283 mgd (439 cfs) of Lake Michigan water would be added to domestic consumption. This translates into approximately 2 million people that previously did not receive lake water, would be able to enjoy it. This new source of water supply will not only benefit its immediate receivers but will also result in an economic stimulus to the entire Chicagoland area, by providing a reliable source of good quality water supply.

TARP was designed to give the Chicago metropolitan area the optimal environmental protection that could possibly be provided. More importantly, no other project was found to be as cost-effective. In addition, the beneficial use of the project is being enhanced by the addition of the flood control reservoirs now being designed and constructed by the Corps of Engineers, which will be connected to the tunnels for additional capture and storage of combined sewage during flood events. We believe TARP stands as a tribute to our nation's Clean Water goals and one that is being accomplished within the most economical constraints.

REQUESTED ACTION

The $10 million we are seeking in fiscal year 2001 funding in the Subcommittee's bill will help keep the local sponsor whole for the advance construction it plans to accomplish on the Torrence Avenue Leg for the Calumet System of the congressionally-authorized TARP project. This funding will complete the Torrence Avenue tunneling segment. While the TARP project was originally authorized at 75 percent federal funding, the District as local sponsor has been contributing at least 50 percent of the total project cost. We greatly appreciate the Subcommittee's endorsement of our request over the years to advance the construction of this work. This fiscal year 2001 work will go a long way to address serious water quality, stormwater and safety problems. It will have a tremendously beneficial impact on a community, which suffers from water pollution and significantly flooding problems. The EPA has approved the facilities plan for the overall TARP project and design has been completed. The EPA has identified this particular segment of work as the next critical section of the plan to be constructed based on significant water quality benefits.

Once on-line, the Torrence Avenue Leg of the Calumet System will capture 2.0 billion gallons of CSOs per year and will protect 15.6 square miles of the City of Chicago from raw sewage backup and flooding, will protect the Calumet River from backflows and local infrastructure, including a public water supply plant from damage.

We urgently request that this funding be included in the Subcommittee's bill for the construction of the Calumet System of the TARP project. We thank you in advance for your consideration of our request.

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 $2 million from the Environmental Protection Agency (EPA) 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 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.

The 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 understand better 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

The 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.

For fiscal year 2001, our Coalition is seeking funding of $2 million from the Environmental Protection Agency (EPA). There is a national need to address issues related to the 8-hour ozone and PM2.5 standards set by EPA. Nationally, research and data gaps exist in effectively coordinating particulate matter and ozone control strategies, in understanding ozone deposition, and in using models for future ozone and particulate matter SIPs (and updating existing SIPs). To address these national, SIP-related issues effectively, requires federal assistance, and CCOS provides a mechanism by which California pays half the cost of work that the federal government should otherwise pursue. California should not have to bear the entire cost of the addressing these issues.

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. The quality and concurrency of these studies bring both technical and financial benefits that merit EPA funding for the purpose of addressing national, SIP-related issues.

Financially, 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. The study itself is also very cost-effective since it builds on other successful efforts including the 1990 San Joaquin Valley Ozone Study.

From a technical standpoint, carrying out both studies concurrently is a unique opportunity to address the integration of particulate matter and ozone control efforts. Regarding the need for ozone deposition research (how much ozone is removed from the ambient air), California is an ideal natural laboratory for studying deposition given the scale and diversity of the various ground surfaces in the region (crops, woodlands, forests, urban and suburban areas). With respect to SIP-based modeling, evaluating and testing various models with the extensive data provided by both CCOS and the California Regional Particulate Matter Study will advance the use of models for future SIPs nationwide since the region covered by the study is large and technically challenging. Improving model performance for SIPs is essential since models drive emission reduction targets and control strategies. The federal government should fund continuing efforts to improve the performance of models used in SIPs.

Thank you very much for your consideration of our request.

PREPARED STATEMENT OF THE ENVIRONMENTAL SCIENCE AND ENGINEERING CENTER, MARIETTA COLLEGE

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to submit testimony to the hearing record regarding an important initiative for which Marietta College, in Marietta, Ohio, is requesting $2 million in federal partnership assistance from the Environmental Protection Agency in fiscal year 2001. Specifically, the College is seeking a total of $3 million in federal partnership fund-

ing for the establishment of an on-campus Environmental Science and Engineering Center and field station. This Center will physically link the various current ongoing environmental education and research activities with research to be conducted at an environmental field station and will provide outreach to industries and environmental scientists in the surrounding region.

The Environmental Science and Engineering Center will house an Environmental Science and Engineering Program at Marietta College. This program will build upon the College's considerable expertise in the environmental area, including departmental and programmatic resources in Environmental Science, Biology, Chemistry, Geology, Physics, Health Sciences, Leadership, Business, Entrepreneurship, and the only Accreditation Board for Engineering and Technology (ABET) accredited Petroleum Engineering program in the US offered at a small, private liberal arts college. The purpose of the Center will be to provide opportunities for teaching and research into critical areas of environmental concern for the greater Ohio Valley, for the region, for the country and even internationally through exchange and education projects. Further, it will provide a clearinghouse of environmental compliance information and assistance to local industry.

These facilities will also be places where new models and techniques for processes such as groundwater contamination remediation can be developed, taught, and disseminated in conjunction with such organizations as the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the Natural Resource Conservation Service and the Ohio EPA. A further goal of the program is to provide the capacity for an improvement of data collection across the environmental spectrum. Along with greatly expanding the College's on-campus capacities and enhancing them further through a field station, the funding sought will be used to develop and monitor a number of fixed air and water quality monitoring sites within the region and to develop a mobile sampling and analysis capability.

Washington County, of which Marietta is the county seat, presents a textbook set of conditions and situations within which quality environmental science and engineering teaching and research can be accomplished. Marietta is loca is located at the confluence of the Ohio River and one of its major tributaries, the Muskingum River. It presents a marvelous environment for the study of all aspects of the riverine environment, from the biological to the chemical—to the cultural and political. Marietta is also surrounded by a considerable number of pristine, undeveloped natural areas. Directly adjacent to the city to the north, west and east are large expanses of the Wayne National Forest. To the south, there are islands that are part of the USFWS-administered Ohio River Islands National Wildlife Refuge. This section of the Ohio River is an especially exciting area for the study of certain biological resources, particularly of benthic freshwater life forms.

Within the region, there is a significant amount of industrial concentration, especially in the field of chemical engineering and petrochemical processing. Washington County has had the highest (worst) rating in the state of Ohio for hazardous air pollutants for years, and a considerable amount of hazardous waste site remediation is taking place within and adjacent to the city of Marietta. Marietta, the oldest town in what was the Northwest Territory, has had over 200 years to develop business and industry, along with the attendant environmental problems. In-stream gravel extraction and quarry mining are present within the county, and there are operating farms in the area. Within the county, there are numerous sites of operating or capped natural gas and petroleum wells. New wells are continually being drilled in the vicinity of the college and offer our students the opportunity to study oil and gas well drilling, completion and production technology firsthand. Ohio is also a leader in the area of natural gas storage, whereby old, depleted gas reservoirs are converted to storage reservoirs where gas is injected during spring and summer, and withdrawn during the fall and winter to supplement pipeline supplies of gas. In short, a great number of historical and current activities have direct impact upon the quality of the local and regional environment. All of this activity is taking place with relatively little ongoing testing, analysis of data, and monitoring of environmental quality.

Despite the general economic conditions of the surrounding regions, in the two counties most proximate to the college, Washington County, Ohio and Wood County, West Virginia, there is a considerable industrial base. There are a large number of industrial operations of major national and international firms as well as a number of locally based supportive industrial firms. These plants and supporting industrial and commercial enterprises provide foundational elements for the local economies and are key employers. The presence of these firms presents both opportunity and challenge for Marietta College. On the one hand, they represent a key consumer of our educational product, both in the form of interns and of permanent employees. On the other hand, they are also key sources for much of the pollution that our En-

vironmental Science students study to help them with compliance issues. As federal and state authorities move forward in regional and basin regulatory initiatives, the plants in the Valley have ever increasing needs for students and graduates with expertise in Environmental Science and Engineering. Beyond the local region, demand for Environmental Science and Engineering graduates, especially ones who do their coursework at schools like Marietta College where they can become exposed to "real world" environmental problems, appears to be growing steadily.

Southeastern Ohio, in general, and Marietta/Washington County, in particular have been left out of most past governmental initiatives in the area of environmental analysis and research. At the edge of Appalachia, it lies at the far southeastern end of U.S. EPA region 5, with the greater area being situated in the intersection of three U.S. EPA districts (5, 3, and 4). The nearest OEPA office is nearly 70 miles away. The county usually has to rely on a single monitoring station for air quality data and not even that for water quality monitoring.

The Environmental Science and Engineering Center of Marietta College will provide space, facilities and equipment for students and faculty doing work in a range of environmental programmatic tasks and functions. The Center will contain classrooms, laboratories, offices and other facilities collectively housing the program and all its components. Marietta College with its unique mixture of a traditional liberal arts curriculum with strong Science and Professional programs, such as Petroleum and Environmental Engineering, presents a resource of the region, state and nation to provide the education and training necessary to produce top-flight professionals in this area.

Marietta College is the only small, private, liberal arts college in the U.S. that offers a professional accredited degree in petroleum engineering. Its program has been compared to that of much larger research institutions such as Texas A&M, University of Oklahoma, and Louisiana State University. Marietta's petroleum engineering faculty bring a wealth of experience to the classroom, having worked in the industry in research and development both in the U.S. and abroad. The size of the College makes it possible for faculty to bring this experience into a one-on-one teaching environment, which is something not seen at larger universities.

The Environmental Science Program at Marietta College is continuing to develop as a College "peak of distinction." An Environmental Engineering program is being developed as a natural outgrowth of the current interaction between environmental science and petroleum engineering programs. Plans have also been implemented to integrate Environmental Science into the Education curriculum and the core general education curriculum to improve K–12 teacher abilities in the sciences.

Close to 30 companies, foundations/associations, government agencies, and academic institutions have been a partner or sponsor of the Marietta College Environmental Science Program. It is expected that many of these groups will benefit from the establishment of an enhanced program in environmental science and engineering and utilize a field station through the provision of environmental compliance monitoring, information and technical engineering assistance. Professionals from these entities also participate in Marietta College's training programs.

The Environmental Science and Engineering Center will physically link the various current ongoing environmental education and research activities research to be conducted at the environmental field station and for the provision of outreach to industries and environmental scientists in the surrounding region. The purpose of the Center will be to provide opportunities for teaching and research into critical areas of environmental concern for the greater Ohio Valley, for the region, for the country and even internationally through exchange and education projects. Further, it will provide a clearinghouse of environmental compliance information and assistance to local industry.

The field station of the Marietta College Environmental Science and Engineering Center will be located on a riverine site, with sufficient land area and vegetation/habitat to accommodate a variety of research, examination, demonstration, and other educational activities. This lab will be equipped to allow for work in environmental chemistry, field biology, field geology and petrochemistry/physics. Provision will be made for acquiring at least three other sites for the placement of water and air sampling remote from the field station. The field station will have assigned to it permanently a van equipped for field sampling and field analytic chemistry. Ideally this vehicle could have the capacity to transmit and receive voice, visual and data streams so that field sampling could be integrated with remote classroom instruction for use by the college and cooperating local primary and secondary schools.

Marietta College is seeking federal partnership grant assistance of $3 million to establish the Environmental Science and Engineering Center and the initial Field Station with the technology necessary to link it to campus. The Center will be an integral part of a new and renovated $21.5 million science complex. The Center for

which we are seeking assistance will house several environmental laboratories, including a state-of-the-art Geographic Information Systems laboratory, a field ecology/field sample laboratory and sample storage areas, an analytical chemistry laboratory/water & air sample testing facility, a data collection station, and other discipline specific equipment. This funding will go toward constructing and equipping the Center and Field Station and will include the telecommunications interface to the main campus and uplinking capabilities to share information with local and regional primary and secondary schools. Federal assistance in the amount of $2 million in fiscal year 2001 would establish and equip the field station as well as provide for the technology and equipment on campus to interface with field station activities.

The College plans to equip most of the laboratories in the science complex and teaching spaces through internal expenditure, grants (public and private) and appeals to industrial and commercial partners. The College, like other private liberal arts colleges, is somewhat at a disadvantage when compared to public state supported schools in access to many state and federal grant funds. Further, the current size and existing facilities base works against the competitiveness of the College in other grant competitions.

It is our firm belief that this will be not only a unique teaching program but also one with the added benefit of providing needed expertise to state and federal environmental entities and to local industries in need of assistance.

PREPARED STATEMENT OF THE AMERICAN SOCIETY FOR MICROBIOLOGY

The American Society for Microbiology (ASM), the largest single life science organization in the world, comprised of more than 42,000 members, appreciates the opportunity to provide written testimony on the fiscal year 2001 budget for the scientific research programs within the National Science Foundation (NSF) and the United States Environmental Protection Agency (EPA).

The ASM represents scientists who work in academic, industrial and governmental institutions worldwide. Microbiologists are involved in research to improve human health and the environment. The ASM's mission is to enhance the science of microbiology, to gain a better understanding of basic life processes, and to promote the application of this knowledge for improved health, and for economic and environmental well being.

This testimony will outline the ASM's funding recommendations for both the NSF and EPA research and development programs for fiscal year 2001.

NATIONAL SCIENCE FOUNDATION

The ASM, a member of the Coalition for National Science Funding (CNSF), strongly endorses the coalition's recommendation to provide the NSF with at least the 17.3 percent, or $675 million, increase proposed by the Administration for fiscal year 2001. This would raise the NSF's overall budget from $3.89 billion in fiscal year 2000 to $4.57 billion in fiscal year 2001. The ASM also urges Congress to consider the recommendation to sustain this expansion of the NSF budget over the next five years in order to reach the Agency's budget goal of $10 billion.

The NSF's mission is to promote and advance scientific, mathematical, and engineering research and education in the United States by funding the highest quality academic research and education programs. The NSF is the premier basic science agency in the United States and has effectively stimulated and supported the best scientific talent in the country, which has led to cutting edge research discoveries. The NSF budget, however, has not grown commensurate with its record of achievement and broad and unique responsibilities to support science, mathematics and engineering research across disciplines. This year, the Administration has recognized this deficiency by proposing a substantial increase that will restore balance among scientific fields. The NSF must ensure that the entire spectrum of research fields receives strong federal support and that America's human resources in science and technology are replenished. Enhanced support for the NSF's efforts to improve science education will help expand our nation's intellectual capital. Strong links between research and education are essential to a healthy research enterprise, an educated public, and a well trained future workforce.

The NSF is a key part of this Nation's great enterprise of discovering new knowledge, which in turn creates new industries, better products and services—all contributing to our economic strength, national security and general well-being. The NSF is one of the few government agencies that support fundamental basic research. United States leadership in science and technology is dependent on sufficient funding for basic research. Most of today's scientific achievements in areas

such as bioremediation of past industrial pollution, the development of new antibiotics and drugs, biopesticides, and biotechnology all have their roots in basic research. The many future public health and environmental challenges the United States will face can only be overcome through the potential of basic research to generate crucial new scientific knowledge and advancements that lead to new technologies for the future.

The NSF is the primary source of funding for scientists in the United States working in many areas of biological research. Programs supported by the NSF, for example, are critical to microbiologists, especially as they relate to the exploration of biodiversity and the roles of microorganisms in global biogeochemical cycling reactions that maintain the environmental quality of the earth.

Microorganisms surround us and affect our lives in many ways. They play key roles in processing our wastes, recycling the nutrients that support our agriculture, forests and fisheries, yield new pharmaceuticals, provide key tools for biotechnology, affect the quality of our food and water, control some pests (biocontrol), and cause disease. The NSF is to be complimented for recognizing a few years ago the important role microorganisms play in our well-being and in opportunities for basic science advances through its Microbial Biology initiative. This led to new programs such as LExEN (Life in Extreme Environments), Microbial Observatories which focus on the discovery of important but uncultured microorganisms, and the first Biocomplexity Program which is focused on microbially based ecosystems. ASM applauds these new initiatives. Microorganisms do present very different types of research challenges and opportunities than those for macroorganisms. Hence we encourage NSF to maintain its momentum in Microbial Biology programming to ensure that basic discoveries for this group of organisms is realized.

New advances in science have provided new opportunities and needs in microbiology research which should be considered in NSF programming. These areas are the following.

GENOMICS RESEARCH

The tremendous improvements in DNA sequencing technology have reduced sequencing costs and greatly enhanced the number of complete microbial genome sequences currently available and becoming available in 2000. Complete genome sequence data revolutionizes the approach to microbiology and for the first time gives the complete gene information necessary for an organism's function and success. There are new obstacles, however, to fully understanding this information, requiring advances in software, computation, proteomics, gene function, and informatics. NSF is a key agency for supporting research that utilizes genomic information in new and creative ways. The ASM encourages the Foundation's efforts through workshops and the development of an interagency group designed to identify gaps and opportunities within genomic research. This should extend beyond the more obvious areas of molecular biology and genetics to the areas of ecology, taxonomy and population biology as well as to the geosciences, and the computational and engineering areas.

BIOCOMPLEXITY

ASM supports NSF's bold initiative to better understand the complexity of interactions between organisms and their environment so that organism success, human impact, and trends in our global environment can be better understood and properly managed. Advances in the underlying disciplines from molecular biology, ecology and the geosciences to mathematics and the computational sciences have now made it feasible to begin to understand more complex interactions. Microorganisms are key members of the soil, water, plant, and animal environments and therefore are dominant factors in understanding these interactions. Furthermore, only a small percentage of the microbial species on earth are known, leaving their functional role unknown. These unknown organisms are the largest untapped source of biodiversity and a potential source of new pharmaceuticals, enzymes, biocontrol agents, and tools for nanotechnologies.

The ASM also endorses NSF's initiative to establish cutting-edge technologies for exploring the earth's global biology in the form of the National Ecological Observatory Network (NEON). We could expect that microbes, the most important catalysts of global elemental cycles, would be comprehensively explored with NEON-based technologies.

MICROBIAL INFORMATICS

Information from genomics, biocomplexity, and NEON, as well as other physiological, systematic, and biochemical studies needs to be organized and integrated in a manner that is easily accessible to the scientific community. The jobs of the many

practitioners of microbiology would be more efficient if microbial data were available in an integrated electronic database and new insight about the most numerous organisms in our universe could be more readily realized. NSF needs to recognize that biological databases, such as microbial databases, are a central and vital infrastructure need to modern day biological research and should be treated as a central national facility. NSF's information technology research (ITR) appears to also provide for advances useful in future biology research, including microbial informatics. With more intensive and extensive data, we need better ways to analyze, visualize and compute the information. ASM looks forward to the benefits from ITR.

Members of the ASM, whose activities include research concerned with the impact of microorganisms on the well-being of humans, animals, plants, and the environment, are very supportive of NSF's increased focus on microbial biology. For years, research efforts have concentrated on the study of microbes in human and animal health. The unknown microbial world provides opportunities to discover new knowledge about microbial life forms and their potential application in industry, medicine and agriculture. In addition, microbiological research continues to provide the foundation for today's advances in biotechnology and for understanding the role microbes play in sustaining our global environment. Future accomplishments and their safe application to increased agricultural productivity (an important by-product of biotechnology) will not be possible without NSF funded basic research.

ENVIRONMENTAL PROTECTION AGENCY

The EPA funds important basic research activities in focused areas related to the Agency's mission of protecting the environment. The EPA's scientific research and development programs are of interest to many of ASM's members who work in the fields of applied and environmental microbiology. Research on environmental microbiology is essential for maintaining air, water, and soil quality; for assuring the safety of potable water supplies; for providing safe means for waste disposal; and for cleanups of environmental contaminants by bioremediation. The ASM believes that sound public policy for environmental protection depends on adequately funded programs of intramural and extramural research based on a system of peer review to assure that support is awarded to research programs having both quality and relevance. The EPA, which has partnered with the NSF in recent years for peer review of some extramural research programs, has begun its own peer review system based upon the NSF model. Critical peer review of both the intramural and extramural research programs of the EPA are necessary for ensuring the quality and scientific validity of studies that are funded.

SCIENCE TO ACHIEVE RESULTS PROGRAM

The EPA's Science to Achieve Results (STAR) program is an important mission-driven, extramural research initiative. This program is targeted to receive $110 million for fiscal year 2001. This program funds important environmental research proposals from scientists outside the federal government and is a valuable resource for the EPA in finding solutions to many of the complex environmental problems we face today. Grants made under the STAR program last from two to three years and provide about $150,000 of scientific support per grant year. The STAR program funds projects in specific focal areas including drinking water, ecology of harmful algal blooms, water and watersheds, ecological indicators, and pollution prevention, which have significant microbiological components. The ASM urges the Congress to fully fund the STAR program at the requested level of $110 million. ASM recommends, however, that at least 20 percent of the STAR budget be open for exploring broader issues not covered by targeted RFA's. This mechanism captures the creativity of the scientific community to foresee EPA relevant needs and solutions.

CLEAN AND SAFE WATER

The ASM supports the Administration's request of $48.8 million for Safe Drinking Water Research. The ASM applauds the EPA's support of such program initiatives as drinking water safety standards, cost-effective water treatment technologies focusing on microbes, improved water safety guidelines and pollution indicators, and a federal database of beach advisories and closings across the United States. ASM also commends the EPA's continued research efforts to strengthen the scientific basis for drinking water standards through use of improved methods and new data to better evaluate the risks associated with exposure to microbial and chemical contaminants in drinking water. Additionally, the ASM is pleased with the EPA intra-agency initiative to address scientific and methodology gaps across water programs. ASM hopes that this will serve as a model for improved coordination among several

federal and state agencies in dealing with microbial pollutants in the nation's drinking and recreational water.

GRADUATE ENVIRONMENTAL FELLOWSHIP PROGRAM

The EPA's Graduate STAR Environmental Fellowship Program has been an outstanding success in attracting some of the best young talents to environmental research. This program has been level funded at $10 million per year since fiscal year 1998 years and is proposed for level funding again in fiscal year 2001. ASM strongly endorses this program and, based on its success, suggests that the funding be increased to $15 million for fiscal year 2001. Both the public and private sectors will benefit from a steady stream of well-trained environmental specialists. The fellowship program has had a major impact in attracting exceptionally talented young people to pursue careers in environmentally related fields. With environmental challenges facing the nation including cleaning up toxic waste, ensuring cleaner air and water, and providing safe food and drinking water, there is a clear need for highly skilled, well-trained environmental experts to find solutions to these pressing issues.

Mr. Chairman, on behalf of the American Society for Microbiology, thank you for the opportunity to testify before your Committee on the fiscal year 2001 appropriations for the EPA and the NSF. I would be pleased to answer any questions from you here today, or in writing at a later date.

PREPARED STATEMENT OF THE ENVIRONMENTAL INSTITUTE OF WESTERN MICHIGAN UNIVERSITY

Good morning. I am Charles Ide, Director of the Environmental Institute at Western Michigan University in Kalamazoo, Michigan. It is an honor to be here before you today to discuss extremely important environmental issues that are shaping both the quality of life and economic development in southwestern Michigan. The Environmental Institute carries out activities in three important areas: environmental research, education, and community outreach. In this regard, the Institute provides cutting-edge research that builds upon studies sponsored by federal and state agencies, educates students and the public about complex environmental issues, and works with local environmental stakeholder groups in producing real solutions to problems that are currently limiting economic development.

The state of Michigan economic base is characterized both by heavy industrial and agricultural activities. For years, these activities have placed a legacy of environmental contaminants in the forests, farmland, waterways and lakes that give Michigan its reputation as a beautiful place to live and recreate. This is this certainly the case in the Kalamazoo River watershed which has been designated a Great Lakes area of concern and a Superfund site because of its degraded environmental quality.

The Kalamazoo River watershed is a system of lakes, rivers and other waterways stretching 162 miles and terminating in Lake Michigan. There are about 2,450 lakes and ponds totaling 37,500 acres and 542 linear miles of major streams scattered across the watershed. About 400,000 people live in the Kalamazoo watershed, which covers about 2,000 square miles in 10 counties.

The Kalamazoo River Watershed contains a 35-mile-long Superfund site, listed for its polychlorinated biphenyl (PCB) contamination—primarily due to discharge from deinking operations at local paper mills from the 1950s to the mid-1970s. There is evidence that PCBs continue to be released into the watershed from contaminated stream banks when water levels rise. The total mass of PCBs in the river sediments has been estimated at 230,000 pounds. The Kalamazoo River is one of the major sources of contaminant flow into Lake Michigan.

Wildlife such as fish, ducks, turtles, and eagles sampled along the river showed high tissue levels of PCBs. Mink showed the highest whole body PCB concentrations of any mink tested in the United States. These levels greatly exceed levels known to inhibit mink reproduction. In addition, recent epidemiology studies indicate that, although fish advisories have been in effect for some time, a substantial number of humans—mostly economically disadvantaged—eat fish from the river and show elevated levels of contaminants in their blood.

A variety of other contaminants are also present in river sediments including methyl mercury pesticide residues. Several tributaries that are also part of the Kalamazoo River watershed are contaminated with heavy metals and industrial hydrocarbons. Much of the watershed is also impacted by non-point source pollution caused by agricultural and urban run-off and unsound land-use practices.

Due to our recognition of the limitations of Superfund and the need to respond to community and interested parties request for a comprehensive assessment of po-

tential future uses of the entire Kalamazoo River watershed, the Western Michigan University Environmental Institute is serving as a catalyst for the development of a universal plan for the watershed.

Working with leaders from a diverse cross-section of community stakeholders and environmental professionals, the Environmental Institute is gathering data related to agriculture, recreation, economic development, human health, ecological impacts, and other land-use issues encompassing the watershed. The research produces neutral, third party data that extends and augments state and federal studies. Duplication of resources is avoided at all levels. The work is being carried out in conjunction with the city of Kalamazoo's efforts to restore contaminated river properties for revitalization of the city's waterfront as a shopping and tourist attraction. Thus, Western Michigan University—the only major research university in southwestern Michigan—is playing a vital role in helping people in the community deal with environmental problems inherited from previous decades. The Environmental Institute will develop option to shape present and future activities that will assure a sustainable and beneficial watershed resource for future generations.

In addition, the research activities included in this initiative will provide for the development of new environmental technologies which can be transferred to the private sector to serve as a base for high-tech economic development in the region. These new technologies include biotech based molecular tools for rapid, reliable, and inexpensive ecosystem and human health risk assessment. Additional technologies include new ways for cleaning-up contaminated soils and sediments and assuring that contaminants are actually degraded and not merely moved to a new location to become someone else's problem.

All data, including historical data and data provided by government agencies and government contractors, will be placed in a database accessible on the World-Wide-Web. This will allow for the electronic layering of many types of data onto maps of the watershed which can then be used by academics, the public, and environmental policy makers.

The project involves collaboration among academics, state and federal workers, local policy makers, and local stakeholder groups in planning and carrying out watershed management and restoration. The university is serving as a source of new research, development, and technology transfer for solving long-standing environmental problems. The university is also facilitating communication and joint decision making across the many jurisdictions that regulate economic activities and the quality of life related to the watershed. This collaborative venture will serve as a model for the more than 700 other comparable Superfund and related sites nationwide. The tools developed will also be applicable for restoring and managing polluted watersheds worldwide—some of which have been damaged far beyond watersheds found in the United States.

Given the magnitude of the Kalamazoo River Watershed Initiative and its potential to develop solutions for environmental problems that can be utilized in similar sites across the country, I respectfully request that the Chairman and members of the Subcommittee provide $3 million through the Environmental Protection Agency in fiscal year 2001 to Western Michigan University for the continued development of the Kalamazoo River Watershed Initiative. Thank you for the opportunity to appear before the Subcommittee and for your consideration of this request.

PREPARED STATEMENT OF THE PASSAIC VALLEY SEWERAGE COMMISSIONERS

Good afternoon Chairman Bond and Members of the Committee, my name is Robert Davenport and I am the Executive Director of the Passaic Valley Sewerage Commissioners (PVSC) in Newark, New Jersey. I would first like to thank you for the opportunity to testify today.

PVSC owns and operates one of the largest wastewater treatment plants in the nation. We treat wastewater from 1.3 million people in 47 towns and cities and from over 300 large industries in Northern New Jersey.

When I addressed this distinguished committee last year our Passaic River/Newark Bay Restoration Program was just getting started. This year I'd like to thank you for your past support and update you on the progress and the achievements of the program we've made in the last year. Your funding assistance of $5 million, combined with state and local funding, made possible the construction of the first phase of our high priority combined sewage overflow protection project.

This project has a particular importance for our region of the country. New Jersey is distinguished as being the birthplace of industry and manufacturing in the United States. The industrial centers of Newark, Jersey City and Paterson devel-

oped and thrived in the 1800's; generating the goods and capital that contributed to the building of our state and nation.

Unfortunately, the engineering standards at the time of this great development called for the combining of both storm water and sanitary sewers into one system. Therefore, when it rains, storm water enters the combined sewer systems and the capacity of the sewer lines is exceeded which causes a mixture of untreated wastes and rainwater runoff to discharge into the local waters. This, as you know, is called a Combined Sewer Overflow, or CSO. Engineers were simply unaware of the environmental detriment caused by combining both systems into one. Science followed the principle that dilution of wastewater by stormwater runoff in a combined sewer system would have minimal impact upon the environment. We have since learned that this is not the case. The Passaic River and Newark Bay are now faced with swimming prohibitions due to elevated coliform bacteria concentrations and fishing and shellfishing bans due to the contaminated river sediments. Dredged material disposal options are limited due to toxic contaminants such as heavy metals and organic compounds in the river sediments. Floatable debris impacts the aesthetic qualities of these water bodies.

While in the process of discovering the impact of CSOs on the environment, the economic base of Passaic Valley's combined sewer communities has experienced dramatic erosion. The cities of Newark, Jersey City, Paterson, Harrison, East Newark, Bayonne and Kearny are among the poorest communities in New Jersey, and each has a combined sewer system which continually threatens the water quality of the Passaic River and Newark Bay during wet weather events.

The traditional solution for reducing CSOs is to separate the storm water from the sanitary sewers. The estimated cost of this traditional solution will be well over $5 billion. This has never been and will never be a feasible solution.

For the last 30 years New Jersey has been struggling to find a solution that is both economically viable and environmentally acceptable to the problem of CSOS. PVSC found just such a solution. The Passaic River/Newark Bay Restoration program has a three pronged approach to alleviate the ongoing pollution to these NJ resources.

The first element of the program is the implementation of plant wide improvements to increase the treatment plant's wet weather capacity from 368 million gallons per day to 700 million gallons per day. Combined sewer discharges will be reduced by 332 million gallons per day to attain 106 percent of EPA's Long Term Control Requirement for wet weather flow pollutant removal. The program will result in the removal of 4,000 lbs/year of Organic Compounds, 90,000 lbs/year of toxic heavy metals, and 12,000,000 lbs/year of Conventional Pollutants which is now discharged to the Passaic River and Newark Bay during wet weather.

The second element is a trackdown of toxic discharges to the sewer system. This work is being implemented in conjunction with the NJ Department of Environmental Protection. The goal is to locate and identify unknown sources of ongoing discharges of toxic chemicals of concern.

The third element is the Shoreline Cleanup portion of the program. We provide coordination and support to municipalities, counties, citizens, service groups, and local businesses to remove trash along the riverbanks in their communities. Gloves, trash bags, trash disposal and other supplies are given to volunteer groups to help them with their clean up efforts. We also launched a 50-foot skimmer vessel which removes floating debris from the waterways in our district. Funds for the vessel's purchase were provided by the Port Authority of New York and New Jersey, and the cost of operation will be borne by PVSC.

PVSC is working with the State of New Jersey, the State of New York, and the USEPA on a bi-state program to reduce discharges of toxic materials throughout the New York/New Jersey Harbor Estuary. Led by PVSC, ten NJ wastewater agencies were awarded over $1,200,000 to sample and analyze for toxic materials in combined sewer, stormwater and treatment plant effluents. We have applied to the State of NJ for an additional $2 million to enable us to track down the sources of the toxic compounds.

The real key to improving the water quality of the Passaic River and Newark Bay is to reduce Combined Sewer Overflows. PVSC's solution will cost $82 million compared to the traditional solutions cost of over $5 billion. The State of NJ awarded PVSC $15 million for the engineering design for the plant improvements needed to implement the program. The construction of three projects to be funded by funds authorized by your committee in the fiscal year 1999 the fiscal year 2000 Appropriations Bill is imminent. Local funds have been used to provide the match for the special appropriations grant. In an effort to accelerate the program, PVSC has obtained a $25 million state revolving loan to finance the construction of a major component of the plan. The first phase of these projects are now underway.

In spite of all the progress we've made, PVSC has exhausted its ability to fund additional work without continued Federal assistance. We are respectfully requesting $12.3 million in Federal funds for this year to complete construction of the first phase of plant improvements. The completion of this phase will get us half way to our goal of doubling our wet weather flow.

Once again, I would like to thank you and the committee for your continued support for the Passaic River/Newark Bay Restoration Program. This program will restore the Passaic River and Newark Bay as a recreational and economic resource for the region with direct environmental benefits for the 17 million people living in the New Jersey/New York area.

PREPARED STATEMENT OF THE UNIVERSITY OF TULSA

It is proposed that the U.S. Environmental Protection Agency continue to support a focused, university-based program, the Integrated Petroleum Environmental Consortium (IPEC), with the goal of increasing the competitiveness of the domestic petroleum industry through a reduction in the cost of compliance with U.S. environmental regulations. Continued Federal support of $4 million is specifically requested as part of the fiscal year 2001 appropriation for the Environmental Protection Agency through the Science and Technology account or other source the Subcommittee may determine to be appropriate.

Mr. Chairman, on behalf of the Integrated Petroleum Environmental Consortium (IPEC), I would like to take this opportunity to thank the Subcommittee for providing $1.5 million in funding for IPEC in the fiscal year 1998 and fiscal year 1999 appropriations bills and $750,000 in the fiscal year 2000 appropriations bill for the Environmental Protection Agency (EPA). Under the Subcommittee's leadership both houses of Congress and the final appropriations bills included funding for this Consortium each year. Specifically this funding was provided for the development of cost-effective environmental technology and technology transfer for the domestic petroleum industry. With funding under the Science and Technology account of EPA, IPEC is implementing a comprehensive mechanism (Center) to advance the consortium's research expertise in environmental technology. IPEC's operating practices and linkages to the independent sector are ensuring that real problems in the domestic petroleum industry are addressed with real, workable solutions. The consortium includes the University of Tulsa, the University of Oklahoma, Oklahoma State University, and the University of Arkansas.

We are pleased to report that, as envisioned and proposed by the Consortium, State-level matching funds have been obtained to support IPEC, creating a true Federal-State partnership in this critical area. In fiscal year 1998 and fiscal year 1999, IPEC received $375,000 in matching funds from the Oklahoma State Reagents for Higher Education. In fiscal year 2000, IPEC received $185,000 from the Reagents. A similar amount has been pledged by the Reagents as matching funds for a fiscal year 2001 appropriation.

Since December, 1997 IPEC has worked closely with the EPA to meet all internal requirements for funding of research centers. These efforts have resulted in an excellent working relationship with the Environmental Engineering Division of the EPA National Center for Environmental Research and Quality Assurance with IPEC's grant from EPA (fiscal year 1998 appropriation) finalized September 2, 1998. Since September 1998 IPEC has funded 12 research projects that promise to help ease the regulatory burden on the domestic petroleum industry. These funded projects include: the use of plants to clean contaminated soils; the natural biodegradation of gasoline by microorganisms in the absence of oxygen; the beneficial use of petroleum wastes as road materials; the control of the formation of toxic hydrogen sulfide in oil wells; the development of simple sampling devices to replace expensive live organisms to assess toxicity in contaminated soils; the treatment and disposal of naturally occurring radioactive material (NORM) in oil production equipment; the remediation of brine-impacted soils; development of a sound scientific basis for ecological risk assemement of petroleum production sites; and enhancing the remediation of oil contaminated soils. These projects were first reviewed and approved by our Industrial Advisory Board (dominated by independent producers) as relevant to our mission of increasing the competitiveness of the domestic petroleum industry and finally reviewed and approved by our Science Advisory Committee (SAC) on the basis of scientific quality. Each member of the IPEC SAC has been endorsed by the EPA.

IPEC has provided $1,080,264 in funding for these projects. However, another $977,765 in funding for these projects have been secured by the investigators as matching funds from industry and industry organizations such as the Gas Research

Institute, the American Petroleum Institute and the Petroleum Environmental Research Forum. This is over and above the matching funds provided by the Oklahoma State Reagents for Higher Education. IPEC has pledged to Congress to work for a 1:1 match of federal dollars. As you can see IPEC is living up to that promise! IPEC is a true public/private partnership.

IPEC's technology transfer program is directed toward providing useful tools for environmental compliance and cost reduction to independent producers. The first objective of this program is to raise the level of technical training of the field inspectors of the oil and gas regulatory bodies of Oklahoma and Arkansas including the Oklahoma Corporation Commission, the Arkansas Oil and Gas Commission, and the Osage Agency of the Bureau of Indian Affairs with regard to first response to spills, pollution prevention, and remediation of oil and brine spills. The second objective of this program is the development of checklists for independent producers to assist them in environmental audits ("staying out of trouble checklists"), remediation of oil and brine spills, and first response to spills. Oklahoma and Arkansas regulatory field agents will be used to deliver these tools to the independent producers.

IPEC's technology transfer flagship is the International Petroleum Environmental Conference. In November, 1999 IPEC held the 6th International Petroleum Environmental Conference in Houston, TX. There were over 370 in attendance from all facets of the oil and gas industry including independent and major producers, service industry representatives, and state and federal regulators. The program for the 6th conference featured several plenary lectures, over 150 technical presentations, exhibits, a poster session and a special symposium on the promise of new technology in the oilfield. Co-sponsors of the conference included the Interstate Oil and Gas Compact Commission, the Railroad Commission of Texas, the Texas Independent Producers and Royalty Owners Association, the Gas Research Institute, the Oklahoma Independent Petroleum Association, the Oklahoma Energy Resources Board, the EPA Office of Research & Development, and the National Petroleum Technology Office of the U.S. Dept. of Energy. IPEC sponsors the participation of ten state regulators from Oklahoma and Arkansas each year at the conference. The 7th International Petroleum Environmental Conference will be held November 7–10, 2000, in Albuquerque, NM.

THE CONTINUING CRISIS IN THE DOMESTIC PETROLEUM INDUSTRY

Much attention has been paid recently to the high costs to consumers of gasoline and home-heating oil. The price of crude oil is the dominant influence on the costs of all petroleum products and the cost of crude oil has been increasing for the last 13 months. Energy experts agree that the price increases currently being experienced were brought on by short-term shocks that resulted from sudden changes in supply and demand. On the demand side there has been increasing demand for petroleum worldwide, especially in the Far East. On the supply side, OPEC and several non-OPEC countries have removed significant amounts of crude oil from production. Once again America has been held hostage to the marketing whims of foreign producers and we are in no position to respond. Since 1990 there has been a 27 percent decline in the number of jobs in the U.S. exploring and producing oil and gas. Ten years ago there were 657 working oil rigs in the U.S.; now there are less than 175. Thirty-six refineries have closed since 1992 and no new refineries have been built since 1976.

In order to regain energy security the U.S. must have a coherent domestic energy strategy. Some may be willing to entrust the health of the U.S. economy to windmills and solar-powered cars, but it will be a stable and profitable domestic oil and gas industry that is the nation's best defense against OPEC market manipulations. The current upswing in crude oil prices may eventually stimulate the industry. However, the record low prices that preceded the current increases have left many companies in financial positions that make it impossible to launch new exploration activities. Additionally, many in the industry are simply uneasy with the volatility that has come to characterize the industry. Much of U.S. domestic oil production is carried out by independent producers who are producing from mature fields left behind by the majors. Although there is a significant resource base in these fields, this is the most difficult and the most costly oil to produce. The independent producer has only one source of revenue—the sale of oil and gas. There is no vertical depth to his business.

A major factor in the high cost of production in the domestic petroleum industry is the cost of environmental compliance. IPEC is working to strengthen the domestic petroleum industry and reduce the impact of market volatility by providing cost-effective environmental technologies to solve those problems that are having the

greatest impact on production costs. A strong and stable domestic petroleum industry is our best hedge against foreign market manipulation.

IPEC'S RESPONSE TO CRITICAL RESEARCH NEEDS

IPEC is well on its way to fulfilling its pledge to you of responsiveness to the needs of domestic petroleum industry and fiscal responsibility. IPEC is continually probing our Industrial Advisory Board for new ways to assist the industry and continually seeking out cost-effective technical solutions to these problems through an aggressive solicitation and review process.

IPEC will continue to work with the domestic petroleum industry to provide technical solutions to those environmental problems that represent the greatest challenge to the competitiveness of the industry. In addition IPEC proposes to launch two new technology transfer initiatives.

NEW IPEC INITIATIVES

Petroleum extension agents

There are over 3500 independent oil producers in Oklahoma and Arkansas. Most of these are very small companies, the "mom and pop" operations whose business is run from the pickup truck and the kitchen table. These small producers are especially vulnerable to industry volatility. The ongoing crises in the domestic petroleum industry requires a multi-level response with a specific outreach effort to the smallest of the independents, those without in-house experts, to advise them on the latest production techniques to minimize costs; how to prevent spills and the accompanying clean-up costs; and how to comply with state and federal regulations to avoid fines and costly loss of production. This type of assistance is not currently provided by the private sector engineering and service companies because the small producers cannot afford private sector services of this kind.

IPEC proposes to provide these services to small independent producers through a system of petroleum extension agents (PEAs). Up to ten (10) full-time equivalent petroleum professionals will be hired in a pilot program to call on small independent producers throughout Oklahoma and Arkansas to provide direct assistance in every aspect of operating a profitable and environmentally friendly business as an oil producer. These PEAs will be seasoned veterans of oil and gas production in the state in which they will operate and operate from the major oil producing areas of the states. PEA services will be made known to producers through advertisements and through field agents of the Oklahoma Corporation Commission and the Arkansas Oil and Gas Commission. PEAs will also seek out and call on small producers in the same way that county agricultural extension agents call on small farmers. In difficult situations PEAs will be able to draw on the significant resources of the IPEC institutions and the IPEC Industrial Advisory Board. Since representatives of the state regulatory bodies serve on the IAB, IPEC can also serve to help resolve problems.

The results expected from this program are: a reduction in the costs of production and increased profitability among small independent producers; lesser numbers of small producers going out of business; less abandoned resources; greater state tax revenues; and increased compliance with environmental regulations and greater protection of natural resources. The Oklahoma and Arkansas PEA program will serve as a model and pilot program for other oil-producing states.

TRAIN THE TRAINER—EXPANDING ENVIRONMENTAL KNOW-HOW AMONG NATIVE AMERICANS

Historically much of the oil and gas produced in Oklahoma has come from Indian land. In the culture surrounding the early days of oil and gas production there were few environmental regulations or concerns. This past lack of proper environmental practice resulted in damage that is still visible and problematic today. The most persistent problems are soil and groundwater contamination resulting from spills and discharge of produced water brine. Historic brine are seen today as scars on the land, devoid of vegetation, and highly eroded. Because of the age of these spills many of the companies responsible are no longer in business. Historic brine scars not only represent a loss of use of land but also a continuing source of pollution of valuable surface waters and groundwater. These brine impacted sites contain salt which jeopardizes public and private sources of drinking water through runoff and drainage. The sole solution to this continuous source of salt pollution is remediation. Many Oklahoma tribes occupy lands scarred by brines and the salt in these scars threatens tribal recreational and drinking water sources.

IPEC proposes to provide tribal organizations with an in-depth training program in environmental know-how related to these oil and gas problems resulting in the education of Native American environmental specialists. Further IPEC proposes to give these specialists the skills and resources to allow them to train others in methods of remediation of oil and brine spills and pollution prevention.

The remediation of crude oil spills and brine scars does not require expensive instrumentation or highly specialized equipment. The major equipment required is simply earth-moving equipment. Most tribes have equipment of this type currently used for road work and other municipal projects. Therefore, remediation of oil and brine spills is not economically beyond the reach of the tribes. By "training the trainer" IPEC extends its reach beyond the classroom into the tribes building self-sufficiency within the tribes to solve environmental problems on tribal lands and protect precious natural resources.

FUNDING OF IPEC

IPEC is seeking appropriations of $4 million for fiscal year 2001 and the succeeding fiscal years fiscal year 2002 and fiscal year 2003 through the Environmental Protection Agency. This request is a $2 million increase over the fiscal year 2001 request. The additional funding will be used to fund the PEA pilot program and the Train the trainer program. The consortium will be responsible for at least a 50 percent match of federal appropriations with private sector and state support over any five-year period. The Consortium will be subject to annual review to ensure the effective production of data, regulatory assessments, and technology development meeting the stated goals of the Consortium.

PREPARED STATEMENT OF THE LOVELACE RESPIRATORY RESEARCH INSTITUTE

It is requested that the U.S. Environmental Protection Agency (EPA) continue to support the National Environmental Respiratory Center to conduct research on the respiratory health risks of combined exposures to mixtures of multiple air pollutants, and provide information and research resources in this field. Funds for the Center are requested in the fiscal year 2001 EPA appropriation.

WHAT IS THE NATIONAL ENVIRONMENTAL RESPIRATORY CENTER?

The National Environmental Respiratory Center (NERC) was initiated through the fiscal year 1998 EPA appropriation to establish a multi-sponsor, multi-disciplinary effort to determine how complex mixtures of environmental air pollutants affect human health. Subsequent appropriations have continued to provide core funding, around which other support has been built. The Center is operated by the independent, non-profit Lovelace Respiratory Research Institute (LRRI) in Albuquerque, NM.

NERC is the nation's sole laboratory program focused completely on how each of the huge number of individual air pollutants and their sources contribute to the respiratory health effects caused by the highly complex pollutant mixtures that people actually breathe. The research is leveraged by opening the Center's studies to collaborations with investigators in other research organizations. The Center also maintains a specially-designed, continuously-maintained collection of published information on the pollution atmospheres and health effects under study. This information resource is available to Congress, researchers, regulators, and the public through the Center's internet web site.

WHY WAS THE CENTER CREATED?

Under our current implementation of the Clean Air Act, environmental air quality regulations focus largely on single pollutants, pollutant classes, and sources, which are reviewed and debated one at a time. In reaction, research has also focused on one pollutant, pollutant class, or source at a time. Of course, people do not actually breathe one pollutant, or pollutants from one source, at a time—they are always exposed to very complex, ever-changing mixtures of air contaminants from many sources. Congress, researchers, regulators, industry, and the public are increasingly aware that the "single pollutant" approach does not provide a full understanding of the true relationship between air quality and health. However, the "pollutant mixtures" problem has been avoided due to its complexity and the many pressures to continue the present regulatory-research cycle.

High stakes are associated with correctly attributing health effects to the proper air contaminants, or combinations of contaminants, and thus correctly estimating both the health-effectiveness and cost-effectiveness of management strategies aimed

at specific man-made pollutants and sources. The more we learn, the less it appears plausible to attribute adverse health impacts solely to individual regulated pollutants independent of the effects of the many other regulated and unregulated co-pollutants. Until NERC was established, there was no substantive, coherent research program aimed specifically at developing a foundation of information that might support the consideration of alternate research and management strategies. Today, NERC and the EPA air pollution "supersites" programs are the only large efforts in this area. NERC was created to conduct laboratory-based research using controlled pollution atmospheres. The supersites program will conduct detailed pollution measurements in the field under uncontrolled atmospheric conditions, with the intent that population health studies will also be done in these locations. Both of these complementary strategies are needed.

HOW DOES THE CENTER FUNCTION AND WHAT DOES IT DO?

Management strategy

Authority for guiding NERC has been vested in an External Scientific Advisory Committee (ESAC), which is listed in Table 1. This broad-based Committee encompasses diverse technical backgrounds, affiliations, and views, but all members are widely-recognized veterans in the air pollution research, regulatory, compliance, and advocacy arenas. Vesting authority in the ESAC reduces the potential impact of conflicts of interest among the diverse government and non-government organizations supporting the Center. The research described below was recommended unanimously by the ESAC.

TABLE 1.—EXTERNAL SCIENTIFIC ADVISORY COMMITTEE

Morton Lippmann, PhD, Chair New York University
Michael Bird, MSc, PhD, DABT, C.Chem, FRSC Exxon Biomedical Sciences, Inc.
Bill Bunn, MD, JD, MPH Navistar
Glen Cass, PhD California Institute of Technology
Jonathan Samet, MD, MS Johns Hopkins University
Gerald van Belle University of Washington
John Vandenberg, PhD US. Environmental Protection Agency
Ron White, MST American Lung Association
Ron Wyzga, MS, ScD Electric Power Research Institute

The Center's management strategy focuses on conducting a tightly-managed multi-year program of integrated studies designed to fill specific information gaps. This strategy allows the resources provided by multiple sponsors to be focused in a unified, goal-directed manner to resolve key issues. Center management has solicited advice from the broader scientific community in designing the details of the experiments, thus optimizing both the research and the acceptance of its results.

RESEARCH GOALS

The Center's research plan has goals that are both primarily theoretical and primarily practical. The primarily theoretical, longer-term goal is to create a new, very detailed database on pollution composition vs. health effects to test the abilities of different statistical approaches to determine which pollution components and combinations of components cause the health effects associated with air pollution. To do this, identical health assays will be applied to animals and cells exposed to several complex pollution atmospheres having different, but overlapping, composition. This work will help determine the plausibility of basing future air pollution research and management strategies on statistical analyses of increasingly detailed air quality and health data. It will also facilitate the selection and development of optimal statistical strategies for evaluating future epidemiological and laboratory data.

The primarily practical, shorter-term goal is to provide direct, head-to-head comparisons of the health effects of pollutants and man-made emissions from sources whose health impacts are currently debated. This goal is accomplished by using real-world, source-based atmospheres to produce the data required to accomplish the theoretical goal. Because many of the pollution atmospheres to be used in constructing the database are emissions from combustion sources, this work will also provide very useful comparisons of the health hazards from different combustion emissions.

RESEARCH PLAN

A series of separate, but identically-designed, studies is being conducted to evaluate the nature and dose-response characteristics of the respiratory and cardiac effects of 12 complex pollution atmospheres recommended by the ESAC. As shown in the table below, the 12 atmospheres will include diesel (contemporary and outdated engines and fuels) and gasoline (contemporary on-road, catalyst-equipped and off-road) engine exhaust, road dust (paved and unpaved) wood smoke (hardwood and softwood), cooking fumes (meat and vegetable), tobacco smoke, and coal-fired power plant emissions. The composition of these atmospheres will be analyzed in detail in order to relate health responses to the several classes of components and many individual components in the atmospheres.

Numerous health assays will be applied to exposed animals and cells to obtain data encompassing the five general categories of respiratory and cardiac effects that have been associated statistically with air pollution. These interrelated health categories include airway and lung irritation and inflammation, allergic responses and asthma, resistance to respiratory viral and bacterial infections, lung and heart function, and cancer potential. Together, the health assays and atmospheres comprise the research matrix shown in Table 2.

TABLE 2.—NERC RESEARCH MATRIX

	Irritation & Inflammation	Allergies & Asthma	Defenses against Infection	Heart & Lung Function	Cancer
Diesel exhaust (contemporary, outdated)	+	+	+	+	+
Gasoline exhaust (on-road, off-road)	+	+	+	+	+
Road dust (paved, unpaved)	+	+	+	+	+
Wood smoke (hardwood, softwood)	+	+	+	+	+
Tobacco smoke	+	+	+	+	+
Cooking fumes (vegetable, meat)	+	+	+	+	+
Coal power plant	+	+	+	+	+

VALUE OF THE RESEARCH

The matrix of data on health response vs. atmosphere composition across the different pollution atmospheres will have considerable value of three general types. First, the data will allow taking advantage of the similarities and differences among the compositions of the atmospheres to determine the individual components, classes of components, and combinations of different components that have the strongest associations with the different health outcomes. This is the underlying goal of the Center. Second, contemporary health data will be generated for each atmosphere. For some of the atmospheres, no such data exist, and for others, no data using contemporary laboratory assays exist. Third, the results will allow direct comparisons of health hazards among the different man-made pollutant atmospheres. Despite the value of knowing the comparative health hazards of these atmospheres, no directly comparable data exist.

SUBSEQUENT RESEARCH

The results of these initial studies will not only provide the benefits described above, but will also lay a foundation for determining the roles of other air contaminants that are not included in the initial studies. There are innumerable atmospheric reaction products, pollens, molds, toxins, infectious agents and other natural and man-made outdoor air contaminants whose potential effects and interactions with the pollutants in the initial atmospheres need to be understood. There are also many potential interactions between environmental air pollutants and exposures in the workplace and home that may contribute to the health effects associated statistically with outdoor air pollution. As results from the initial studies and from other research programs are evaluated, further research needs will be identified and prioritized.

OTHER CENTER FUNCTIONS: RESEARCH AND INFORMATION RESOURCES

The research resources of the NERC studies and the LRRI facilities are being leveraged by facilitating collaborative participation in Center research by scientists in other institutions. External scientists are encouraged to make use of the pollution atmospheres or biological samples to conduct exploratory research extending beyond

the "core" health assays in the Center's research matrix. This allows university and EPA intramural researchers to conduct complementary research in a very cost-effective manner. Collaborations are already planned or underway with researchers at the University of New Mexico, Washington State University, New York University, University of Cincinnati, and EPA's National Health and Environmental Effects Research Laboratory.

An information resource consisting of an extensive bibliographic database encompassing the pollution atmospheres and health effects under study is available via the Center's web site (www.nercenter.org). This is the most comprehensive integrated collection of such information in the world, and consists both of citations available through other search databases and citations from older literature and government reports that are not available in an indexed manner from any other single source. Anyone can access this information to conduct searches or download preprepared bibliographies on selected topics. Of course, the web site also contains other information on the Center's purpose, activities, and status.

WHAT IS THE CENTER'S STATUS AND SCHEDULE?

The advisory committee was formed and, together with the ESAC, LRRI has developed the strategy, and research plans, and other functions described above. The web site is established, its bibliographic database contains over 22,000 citations, and the site is being continuously updated. Five preliminary studies selected by the ESAC and conducted while the core research matrix was being developed are either completed or nearing completion. These studies examined: (1) airway and lung irritation from wood smoke; (2) the role of fine particles in the development of asthma; (3) toxic interactions between ozone and fine particles; (4) the effects of particle-borne metals on heart function; and (5) the development of statistical approaches to estimating risks from multiple pollutants.

The design of the myriad details of the studies constituting the Center's core research matrix is nearly completed. During the past year, workshops and discussions were held at LRRI to obtain broad advice and develop consensus on the statistical design of the studies, the selection of health assays, and modifications to the LRRI engine emissions exposure laboratory.

The study of the first of the pollution atmospheres, contemporary diesel emissions, will begin late this spring. Once this study is underway, the details of the study using the second atmosphere, most likely tobacco smoke, will be finalized, the exposure laboratory suitably modified, and the study initiated. The studies of the different atmospheres will be initiated in a staggered manner, with the number underway at any given time determined by the available funding.

The funding level will be critical to accomplishing the work within a time frame consistent with decisionmaking needs. At a funding level of $4 million/year, completion of the studies of the 12 atmospheres is expected to require approximately 5 years, with data analysis requiring an additional year. Of course, results from studies of the individual atmospheres and comparisons among them will be reported in the interim as each study is completed.

WHAT IS THE CENTER'S FINANCIAL STATUS AND WHAT SUPPORT IS BEING SOUGHT?

Continuation of support from EPA is critical. Progress has been made in developing the required funding from multiple stakeholder organizations, but the target level is not yet in hand. EPA funding continues to be the foundation upon which the remainder of the necessary funding is being developed. Other current and prospective sponsors are supporting the program on the basis that the EPA funding will continue, although all recognize that continued support is not assured. There is support for the goals and strategy of NERC within EPA, and incorporation of the Center into EPA's budget would be a very positive sign to other current and prospective sponsors. At present, the Congressional appropriation is critical to the continuation of the program.

The list of non-EPA NERC sponsors is growing continuously. Among federal agencies, the Department of Energy's Office of Heavy Vehicle Technologies allocated $300 thousand in fiscal year 2000 funds to NERC, and the Department of Transportation has committed verbally to the program with the amount yet to be resolved. Funds received or committed from non-federal sources now total $503 thousand. Among states, the California Air Resources Board has committed to the program. Non-government support has been received or committed from American Trucking Association, California Trucking Association, Caterpillar Inc., Chemical Manufacturers Association, Cummins Engine Co., Deere and Co., Detroit Diesel Corp., Exxon Corp., Ford Motor Co., Japanese Automobile Manufacturers Association, Navistar

International, Phillips Petroleum, and Southern Co. Discussions are underway with a number of additional organizations.

Lovelace respectfully requests that $2 million be designated for the National Environmental Respiratory Center in the fiscal year 2001 EPA appropriation. This support is essential to ensuring continuation of the Center and further development of the complementary support from other stakeholder organizations that is required to accomplish this important work.

PREPARED STATEMENT OF THE ROSENSTIEL SCHOOL OF MARINE AND ATMOSPHERIC SCIENCE

Mr. Chairman and Members of the Subcommittee: I appreciate the opportunity to submit testimony on behalf of my colleagues at the Rosenstiel School of Marine and Atmospheric Science at the University of Miami. We respectfully seek your continuing support in fiscal year 2001 for two important projects.

First, my colleagues and I seek third-year funding through the Environmental Protection Agency for the National Center for Atlantic and Caribbean Coral Reef Research to conduct research to protect and preserve the nation's endangered coral reef resources. Next, we seek second-year funding through the National Aeronautics and Space Administration for the National Center for Tropical Remote Sensing Applications and Resources—the SAR Facility. We have special expertise in both coral reef research and in remote sensing technology and applications, and it is for these reasons that I appear before you today.

Founded in 1925, the University of Miami is the largest private research university in the Southeastern United States and the youngest of 23 private research universities in the nation that operate both law and medical schools. Through its 14 colleges and schools, 1,915 faculty instruct 13,715 students in more than 110 areas of undergraduate study and 162 disciplines for graduate study.

The Rosenstiel School is recognized as one of the premier academic oceanographic research facilities in the world and ranked among the top six nationally. Located on a 16-acre tract on Virginia Key in Miami's Biscayne Bay, the Rosenstiel School provides the only subtropical marine research facility in the continental United States, and is adjacent to and coordinates daily with the national NOAA lab and research facility. Because of our unique location—the Gulf Stream is immediately offshore; just to the south lies a vast expanse of the only living coral reef off the shores of the continental United States; and just to the east the Florida-Bahamas Carbonate Platform—we are an extraordinary resource for the nation, as well as for Florida and the southeast region. Our more than 100 recognized scientists, researchers, and educators collaborate closely with other institutions—in Florida and beyond—in addressing critical national, regional, and Florida's natural, environmental, and climatic challenges.

NATIONAL CENTER FOR ATLANTIC AND CARIBBEAN CORAL REEF RESEARCH

The Rosenstiel School is a major national research institute focusing on the living coral reef as a unique and critical national and international resource, critical to the vitality and health of the marine life and coastal marine environment of Florida and the southeast. Florida's coral reefs are the only living coral reefs off the continental United States. The environmental, climatic, and man-made challenges to and stress on these precious resources are extensive. To preserve and protect our reefs requires the organization and coordination of the broadest range of talent and resources.

We have committed to a major investment of our resources and seek to enlist a broad range of Florida, regional, and national expertise to coordinate the most advanced and productive research that will ensure the protection of living coral reefs. For fiscal year 2001 we seek $3 million through the EPA to continue and expand the National Center for Atlantic and Caribbean Coral Reef Research Center (NCORE), begun in fiscal year 1999, a parallel to the Hawaii-based and focused effort. Together, these centers will provide a balanced, focused, critical scientific mass brought to bear on these precious, unique, and vanishing natural resources.

Coral reefs are the only ecosystems on Earth constructed entirely by the secretions of a complex assembly of marine animals and plants. They are economically important resources of humans as sources of food, medicinals, building materials, and coastal protection. They are especially invaluable, in our increasingly crowded world, for the spiritual relief they provide the millions of people that journey to visit them each year. Unfortunately, changes in water quality due to coastal development, environmental changes potentially related to global climate change, and overexploitation of coral reef fisheries resources, are contributing to world-wide coral reef deterioration at an alarming pace, especially in the Caribbean region. U.S. coral

reefs in Florida are down-stream of the entire Caribbean coral reef system, and are thus dependent on Caribbean reefs for larval recruits and maintenance of fisheries stocks. Florida reefs could also be affected by pollutants released into marine waters by nations in the region, and from our own rivers via discharge into the Gulf of Mexico.

Scientists are hampered in helping government make critical and socially difficult management decisions by our rudimentary understanding of coral reef ecosystem processes. Coral reef environmental research has historically been piece-meal and under-funded with few attempts at true interdisciplinary process-oriented research. Local changes in water quality, broad scale environmental changes potentially related to global climate change, and fisheries over-exploitation of coral reef ecosystems, are thought to be contributing to deterioration of coral reefs worldwide.

NCORE initiated a new approach to coral reef research. The Center seeks to coordinate U.S. coral reef policy and research, and assemble major national and international initiatives pertaining to coral reefs. The Center fosters organization and collaboration within the U.S. scientific community, leads the development of a new level of understanding of the processes and environmental conditions necessary for the establishment, survival, and sustainable use of coral reef ecosystems public. The initial focus is on problems faced by coral reefs in Florida and U.S. possessions in the Caribbean region (Puerto Rico and the U.S. Virgin Islands), and also to coordinate these efforts with those of coral reef researchers within the Caribbean region, in recognition of the importance of larger scale relationships between coral reef systems within the Inter-America Seas.

NCORE invites nation-wide participation of scientists with expertise in coral reef research, and involves scientists from related disciplines. The specific functions of the National Center for Atlantic and Caribbean Coral Reef Research are: (1) to study fundamental scientific aspects of the function of coral reef ecosystems; (2) to establish a database of past and ongoing coral reef research in the United States; (3) to directly interact with resource managers at local to national levels; (4) to provide accurate, but non-technical syntheses to the public; and (5) to develop instrumentation and observational strategies for coral reef research.

NATIONAL CENTER FOR TROPICAL REMOTE SENSING APPLICATIONS

Synthetic Aperture Radar (SAR) is a powerful remote sensing system, able to operate in all weather, day or night. Space-based satellite SAR systems are able to monitor the movement of targets on land or ocean in near real-time, map topography with unprecedented accuracy, assess storm and flood damage to urban and rural infrastructure, locate wildfires, and assess soil moisture and vegetation health. SARs provide data that can be used to forecast major volcanic eruptions and understand the earthquake process, and a host of other military, civilian, and scientific applications. SAR can make a major contribution to SouthCom's various missions, especially in the area of drug interdiction, civil defense (e.g., storm damage assessment), and natural hazard mitigation.

The University of Miami uses SAR data for a variety of terrestrial and oceanographic applications, and has a large amount of experience in the analysis and use of SAR data, and expertise in the operation of satellite downlink facilities.

The SAR receiving facility currently under construction at the University of Miami will provide a unique capability for the Caribbean and southeastern U.S., with a wide range of scientific applications in earth, atmosphere, and ocean sciences, as well as more practical applications in environmental monitoring, natural hazard assessment, civil defense, and defense tactical applications. The station will initially operate at X-band, receiving data from a wide variety of low-Earth orbiting satellites. Initial operations will focus on SAR and visible and infrared imagery, providing a wealth of information about the earth's surface. A high priority will be placed on reliable data reception to low elevation angles (2 degrees above local horizon). A heavy launch schedule over the next few years will place many new satellites with SAR and other radiometric sensors in orbits that require at least two antennas to enable data recovery during simultaneous satellite passes. The voluminous data flow associated with high-resolution satellite sensors such as SAR will require high reliability data archiving with rapid retrieval, rapid dissemination of data (both raw and analyzed), full data analysis capability, and higher level software products for data interpretation.

Last year you provided support to launch this vital initiative. We hope to continue our partnership with the National Aeronautics and Space Administration in fiscal year 2001 and seek $5 million for the NASA Advanced Tropical Remote Sensing Center—the SAR Facility.

For purposes of illustration, I will provide three examples of applications for the SAR Facility: natural hazard mitigation, drug interdiction, and educational opportunities.

NATURAL HAZARD MITIGATION AND CIVIL DEFENSE

It is appropriate that NASA's remote sensing research program include a component of natural hazard mitigation for Central America, South America, and the Caribbean region. The reason is that the nation's long-term security is best served by having prosperous, politically stable democracies in this hemisphere. The U.S. has a role to play in promoting the economic and political "health" of the region. Even ignoring strictly humanitarian considerations, problems such as poverty and civil unrest can negatively impact the U.S. directly and indirectly. Examples include illegal immigration, reliance on a drug economy, and lost market opportunity for U.S. business. The poor infrastructure that is endemic to much of the hemisphere is exacerbated by natural disasters via negative feedback: poor countries generally have weak infrastructure that is easily damaged by natural disasters (witness the recent devastation in Honduras during passage of tropical storm Mitch). The region is especially vulnerable to earthquakes, volcanic eruptions, and hurricanes. Techniques to mitigate the effects of these disasters can be of enormous benefit.

Volcano Hazard.—For volcanoes, SAR interferometry generates accurate topographic data (DEMs) enabling accurate prediction of the direction and speed of lahars, a type of volcanic mudslide. Lahars are often the major "killer" from volcanoes, claiming more than 20,000 lives at Nevado del Ruiz, Colombia in 1985. A mudslide from a dormant volcano was responsible for most of the casualties in Honduras during the recent passage of tropical storm Mitch. SAR interferometry also allows detection of pre-eruption swelling of a volcano, which can be used to help predict eruption. Such studies are only of academic interest at present, because it takes so long to acquire imagery from available ground stations (three month or longer waits are typical). A South Florida ground station can provide at least several weeks warning of major eruption to authorities in the affected area.

Earthquakes.—A major hazard for much of the western Americas. A relatively small earthquake in Los Angeles several years ago caused $20 billion in damages. An earthquake in the 1970's in Managua, the capital of Nicaragua, so severely damaged the city that parts of it were never rebuilt. The associated economic devastation is believed by many social scientists to have been a contributing cause to two decades of civil war. At present most researchers do not feel it is feasible to predict earthquakes. Nevertheless, SAR can play a critical role, by precise mapping of ground displacement during earthquakes, which can lead to better understanding of the earthquake process. SAR is probably the best tool available for this type of study. In some cases, SAR is the only tool, e.g., in inaccessible parts of South America.

Hurricane Damage Assessment and Civil Defense.—As more people and societal infrastructure concentrate in coastal areas, the U.S. is becoming more vulnerable to tropical cyclones. Hurricanes are the nation's costliest natural disaster. Early and accurate warnings can save millions of dollars and reduce the detrimental impact of storms. Quick-look SAR can assess storm damage and identify areas of immediate need. SAR images can also provide information on sea state and surface wind speed, important to weather forecasters and civil defense planners. Radar frequencies are also sensitive to the intensity of rain and can better locate concentrations of strong rainfall within tropical storms. Such real time observations can provide better estimates of storm strength prior to landfall.

DRUG INTERDICTION

Small, fast moving boats are one of the major vectors for drug delivery to the coastal southeastern United States. These boats travel exclusively at night without running lights, and are very difficult to detect. Their low radar cross sections mean that P3 Orion surveillance aircraft equipped with standard ocean surface radar only rarely detect them (the targets have to be fairly close to the aircraft). Given the large area of ocean used by traffickers, and the relatively small numbers of surveillance flights, detection success rate is low.

SAR can easily detect such targets. It does so not by direct detection of the boat, but by wake imaging. The center line wake of a small fast moving boat is typically 100–200 meters long, and is relatively smooth compared to the adjacent ocean surface, and thus is easily detected by standard civilian SAR. A recent test by the Office of Naval Intelligence had virtually 100 percent success at detecting this class of target during nighttime RADARSAT passes. The test target was a fiberglass boat operated by the University of Miami.

At the present time, there are two civilian SAR satellites that a South Florida ground station can access, RADARSAT and ERS–2. On an average, we can expect to image a given "patch" of ocean every few days with these systems, and thus would not detect and track all targets. On the other hand, we could expect to track a much larger number of targets than are currently possible, and could generate, with "post-diction" analysis, an accurate picture of where most illegal traffic is originating and landing. Over the several day transit period of these small craft to the southeastern U.S., approximately 30 percent to 40 percent of targets would be detected in "real time" with available satellite coverage, enabling direct interdiction by the Coast Guard. This assumes, of course, that the data can be made available quickly. The South Florida SAR Facility will make this possible.

In summary, satellite SAR data could make a major impact on the drug interdiction program. However, realizing its full potential requires a dedicated facility in South Florida, integrated into the chain of command of the drug interdiction effort, and integrated into academic efforts in the area of rapid data processing and rapid image analysis. The proposed University of Miami SAR ground station is an excellent vehicle for this collaboration.

EDUCATION: K–12, UNDERGRADUATE, AND GRADUATE LEVEL

The Florida Space Grant Consortium (FSGC) is a voluntary association of 17 public and private Florida universities and colleges, all the community colleges in the state, Kennedy Space Center Astronaut Memorial Foundation, Higher Education Consortium for Science and Mathematics, and Spaceport Florida Authority. Collectively, it serves more than 230,000 students. FSGC represents the State of Florida in NASA's Space Grant College and Fellowship Program. With programs now in place in the 50 states plus Puerto Rico and the District of Columbia, Space Grant joins the Land Grant and Sea Grant Programs to form a triad of federally mandated programs addressing critical national needs in education, research, and service.

The new National Center for Tropical Remote Sensing at the University of Miami would provide a unique opportunity for FSGC to begin dedicated education and training of the use of space-based remote sensing and imagery. Furthermore, opportunities also exist to broaden the educational use of the Tropical Remote Sensing site through a K–12 education partnership with Miami-Dade County Public Schools. We envision the development of a magnet studies program in space science that would be modeled after a very successful existing program in marine science and technology in collaboration with the University of Miami. This partnership would educate first-rate students and help produce the next generation of scientists, engineers, and technology experts for the nation.

Mr. Chairman, we recognize that this will be another difficult year. However, we hope that you and your colleagues on the Subcommittee will find it possible to continue to support these two important initiatives that deal with issues of crucial national importance. The National Center for Atlantic and Caribbean Coral Reef Research will make important contributions to the national effort to save our endangered coral reef communities. Similarly, our proposal for the SAR Facility will enable us to continue our partnership with NASA in developing a vital resource in South Florida that will benefit the entire nation.

PREPARED STATEMENT OF THE NATIONAL UTILITY CONTRACTORS ASSOCIATION

Mr. Chairman and Honorable Members of the Subcommittee, my name is Angelo Di Paolo. I am the owner of Di Paolo Company, a utility and highway construction company in Glenview, Illinois, a suburb of Chicago. I am delighted to participate in this hearing on behalf of the National Utility Contractors Association (NUCA). NUCA is a family of about 2000 companies from across the nation that build, repair, and maintain water, wastewater, gas, electric, and communications systems and manufacture and supply the necessary materials and services.

My family emigrated to the United States in 1956. I cried and begged to return to Italy all the way here, while my grandmother diligently reassured me that everything would change for the better in America—the land of opportunity. It wasn't until I became a small business owner that I fully understood my grandmother's abundant wisdom. Grandmother also taught me the importance of speaking one's mind and backing up those words with actions. NUCA's efforts year after year to ensure appropriate funding for the Clean Water State Revolving Loan Fund for wastewater infrastructure is a model of Grandmother's diligence. We are hopeful to once again convince you to reject the President's proposed cut to the SRF, a program vital to our nation's public health, environment, and economic stability.

PREACHING TO THE CHOIR

I suspect I am largely preaching to the choir today. This time last year, one of my NUCA colleagues asked you to reject President Clinton's lowball request for the Clean Water SRF. Just as he did for fiscal 2000, President Clinton played the budget shell game and requested only $800 million in funding for the SRF for fiscal year 2001. Based on previous experience, Mr. Clinton knows this Subcommittee recognizes the importance of the wastewater infrastructure program. After all, research by the U.S. Environmental Protection Agency (EPA) and various independent studies conservatively estimate that there are more than $300 billion in wastewater infrastructure needs nationwide over the next 20 years. We hope the President does not lose his bet that you will appropriate available funds. For the last two years, Congress has appropriated $1.35 billion for the program. NUCA respectfully requests that you appropriate, at a minimum, level funding for the program. We must stress, however, that $1.35 billion is not enough to meet the ever-increasing wastewater infrastructure needs and to protect the health of citizens currently playing and working in our contaminated lakes, rivers, and streams.

A VIEW FROM THE TRENCHES

As a utility contractor, I have a unique window into the maze of underground infrastructure, including wastewater infrastructure. I must say, the view is not pretty. As the EPA's 1996 Clean Water Needs Survey and 1999 EPA Needs Gap Analysis demonstrate, we as a nation have knowingly failed to maintain vital wastewater infrastructure in a meaningful way. We have the capacity to fix the cruddy pipes and protect public health and the environment. It's time we do so before we irreversibly contaminate our water supply, before sewer moratoriums shut down our communities, and before your constituents' sewer rates go through the roof.

What's out of sight and out of mind to most is clearly visible to utility contractors each day. When prospecting wastewater jobs, we walk along easement lines in residential areas that are sinking ground—ground saturated with raw sewage that has overflowed from failed leaching systems. I see children in these residential neighborhoods cross the same paths.

We regularly uncover pipes with gaping holes from which raw sewage has been escaping into the surrounding ground for months if not years. To make matters worse, the sewer systems are often within yards of waterways.

NUCA has attached the needs (as of 1996) in each of your states to your copies of the testimony. At that time, EPA estimated the nation's needs were $135.9 billion over the next 20 years. The combined wastewater infrastructure needs of the 11 states represented by the members of this Subcommittee were $26.3 billion as of 1996.

SKYROCKETING INFRASTRUCTURE NEEDS, DECLINING FEDERAL INVESTMENT

Over the last year, a lot of updated dollar estimates for the cost to repair and replace the nation's failing infrastructure over the next 20 years have been tossed about. The EPA has preliminarily increased its 1996 estimate from $139.5 billion to more than $200 billion. Private studies demonstrate that the needs will exceed $300 billion. Two hundred or three hundred billion does not really matter when the federal contribution to the SRF the last two years was less than 1 percent of either figure.

Wastewater infrastructure needs are ever-increasing, yet federal capital investment has remained on a steady decline ever since the Clean Water SRF authorization expired five years ago. Because the current lack of authorization unintentionally widens the investment gap by sending an implicit message that wastewater collection and treatment is not a national priority, companion bipartisan bills have been introduced by Sen. George Voinovich, and Representatives Sue Kelly and Ellen Tauscher. The Clean Water Infrastructure Financing Act (S. 1699, H.R. 2720) would reauthorize Clean Water SRF at $3 billion per year for five years. We sincerely hope the spirit of the bill will spill over into the fiscal 2001 appropriations process.

THE CLEAN WATER SRF WORKS

The Clean Water State Revolving Loan Loan Fund is a concise, pragmatic, efficient, and bold preventive measure. The 12-year performance of the SRF has been spectacular. The following highlights are taken from the U.S. EPA's National Information Management System. The information is current through June 30, 1999.

—Cumulative federal capitalization grants of $15.4 billion have been supplemented by state contributions of $3.2 billion, net leveraged bonds of $11.6 billion, loan principal repayments of $3.8 billion, loan interest payments of $3.3

billion, and investment earnings of $2.0 billion. After subtracting $1.7 billion for leveraged bonds repaid, $188 million for state match bonds repaid, $2.7 billion for interest paid on bonds, $431 million for administrative expenses, and $3.8 billion for debt service reserves, there has been $30.3 billion in SRF funds available for projects.

—Of the $30.3 billion available for projects, $26.1 billion (or 86 percent) has been provided for 8,200 wastewater collection and treatment, nonpoint source, and estuary projects. The number of projects rose from just 3 in the year ending June 30, 1988, to 1,280 in the year ending June 30, 1999.

—Of the 8,200 projects approved to date, 58 percent (23 percent of the dollars loaned) serve communities with populations less than 10,000; 31 percent (36 percent of the dollars loaned) serve communities with populations in the 10,000 to 99,999 range; and 12 percent (40 percent of the dollars loaned) serve communities with populations of 100,000 or more.

TAKE THE LEAD, PROVIDE THE SEED MONEY

Over the years, the annual federal investment in the Clean Water SRF Program has been cut in half, yet there remain thousands of miles of barely functioning sewer pipelines that are leaking gallons of raw sewage into underground aquifers daily.

The state revolving funds have become increasingly efficient and effective, but sufficient federal seed money must be invested to ensure that human and environmental costs of the multi-billion dollar funding gap are prevented.

People intuitively understand that their lives are directly linked to water quality and the collection and treatment of wastewater. NUCA thanks the members of this Subcommittee for previously rejecting the President's proposed cuts to the wastewater SRF program. Please continue to take the lead and appropriate, at a minimum, level funding for fiscal year 2001. Better yet, if budget constraints permit, please act in the spirit of the pending bipartisan Clean Water SRF reauthorization bill (H.R. 2720) by appropriating $3 billion for fiscal year 2001.

Thank you for the opportunity to submit testimony.

PREPARED STATEMENT OF THE NATIONAL JEWISH MEDICAL AND RESEARCH CENTER

Mr. Chairman, and Members of the Subcommittee, thank you for the opportunity to submit testimony to the hearing record regarding the newly established Environmental Lung Center at the National Jewish Medical and Research Center in Denver, Colorado. The National Jewish Center, formerly the National Jewish Center for Immunology and Respiratory Medicine, is the world's foremost center for the study and treatment of lung disease.

As you know, funds for research at the Environmental Lung Center were included in recent EPA Appropriations. We successfully completed the Environmental Protection Agency peer review process and are now in our fourth year of working with the Agency. First, I would like to take this opportunity to thank the Subcommittee for its support and to report on the excellent research that is being undertaken as a result of this support. We believe that a very productive relationship with the agency has been fostered. Essentially, the mission of the Environmental Lung Center will be to provide the sound science necessary to assist the agency with regulatory policy in specific areas, specifically respiratory health effects of air pollution.

The goals of the Center include determining the health effects of air pollution in patients with pre-existing lung disease and the mechanisms whereby air pollutants produce adverse health effects. This year, we began to investigate the effects of air pollution in children with asthma and adults with chronic obstructive pulmonary disease (emphysema). We are working to improve our understanding of the scientific basis for evaluating health hazards and the risk for patients with pre-existing lung disease.

This research is extremely important given the fact that in the United States, lung disease is a leading cause of death. It is now well known that man-made environmental and occupational pollutants contribute significantly to the rising numbers of those afflicted, particularly impacting residents and commuters to urban areas and those who work in occupations such as mining, construction, textiles and manufacturing. Indoor air pollution and improper ventilation also cause the spread of respiratory illnesses. To eradicate these illnesses and address general environmental concerns, the Clean Air Act authorized EPA to set exposure standards for six widespread air pollutants. As you know, these standards continue to provoke heated debate in the scientific and regulatory communities. Our task is to find out the extent to which the exposure thresholds are true, as measured against individual suscepti-

bility, and to assist the regulatory bodies in this country to come up with decisions regarding toxic thresholds of compounds and the medical relevance of the EPA's fixed testing-station data to surrounding populations.

As the only high ranking institute in the nation that concentrates on lung disease and the only one that sees patients as well as conducts research, National Jewish has made great contributions to the advancement of medical knowledge about the effects of environmental pollutants on the human pulmonary system. Its location in Denver is significant in that the city is plagued with environmental pollutants (nearly 300,000 Colorado residents have chronic lung disease, which is well above the national average, although our patients come from all 50 states). Our dedicated research at National Jewish has shown definite linkages between certain types of ambient air pollutants and asthma and chronic obstructive pulmonary disease (COPD). We are currently exploring this further.

The Environmental Lung Center's research efforts will range broadly from studies of molecular biology and immunology to direct studies of air pollution on patients with lung disease. The focus of our work during the current year will be on the special features of the lung as an immune organ, the pathogenesis of oxidant and particulate inhalation injuries, and two specific cohorts of patients, childhood asthma and adults with emphysema. For the purposes of this testimony, I will describe the proposed studies in a very general way that will give the Subcommittee a view into the complexities of determining safe levels of airborne toxins given human susceptibility factors.

Our research program is designed to determine the effects and mechanisms of injury of particulates and oxidant gases on the respiratory system. We have chosen particulates because of the national concern expressed by the Environmental Protection Agency and the National Academy of Sciences on how little we know about the health consequences of exposures to particulates. Our institution has great strength in respiratory medicine and immunology, so we can readily bring scientific expertise to bear on this program. These funds will have an immediate impact on our understanding of the scientific basis of the effects of air pollutants on the respiratory system. We have chosen to focus our clinical studies on two groups of patients who are thought to be very susceptible to air pollution. The first group are children with asthma. We have a school on site for children with asthma. We will have a unique opportunity to evaluate the relationship of particulate air pollution to asthma symptoms, clinical and physiologic changes, and medication use. The other group that we have chosen are patients with chronic obstructive pulmonary disease (COPD). This group of patients have a higher mortality rate during times of heavy particulate air pollution. To learn more about the mechanisms whereby air pollutants effect patients with asthma and COPD, we have developed unique murine models of these two human conditions. We will expose mice with genetically defined respiratory and immunologic abnormalities to air pollutants in a defined, well-characterized manner in order to determine the mechanisms of how air pollutants effect the respiratory system. Finally, we have two projects which will determine the effects of ozone and nitrogen dioxide on specific critical proteins and cells of the respiratory system. These systems might provide a new sensitive biomarker to detect adverse health effects without having to use complex clinical indicators of hospital admissions and morbidity.

In fiscal year 2001 we are again requesting $1.75 million to continue these projects. We are particularly proud of our studies on two susceptible populations of individuals with pre-existing respiratory disease. Children with asthma are a special patient population requiring additional studies to define the health risks of air pollution by the EPA. The second patient group are patients with moderately severe COPD or emphysema. It is in this latter group that epidemiologic evidence has indicated an increase in hospitalization and mortality related to particulate air pollution. We are in a unique position for studying the effects of air pollution on individuals with pre-existing respiratory disease.

The major thrust for the next five years is to take advantage of modern molecular biology and genetics in order to study environmental lung disease. Never before have researchers had the ability to determine the genetic basis for individual susceptibility and the molecular mechanisms of disease. Our institution is internationally known for its research in immunology, and we want to utilize this expertise to study environmental lung disease.

Mr. Chairman, we believe that we are the best partner to provide the type of sound scientific research necessary to assist the agency with its regulatory decision-making goals. Our desire is to grow this relationship and hope that the subcommittee will again provide $1.75 million for fiscal year 2001 to continue this relationship for another year. This federal investment will enhance our nation's commitment to protecting the health and safety of its workers, citizens and individuals the

world over. The research conducted by the Center will lead to medical breakthroughs and environmental findings that will assist the federal government to set new standards for both government and business. Your support for these efforts will save lives and ultimately, save costs for the federal government and for businesses who are currently struggling to comply with new standards.

Thank you.

PREPARED STATEMENT OF THE OHIO DEPARTMENT OF NATURAL RESOURCES, DIVISION OF OIL AND GAS

Mr. Chairman and members of the committee, thank you for the opportunity to testify today on behalf of the Ground Water Protection Council (GWPC) in requesting $950,000 in funding for the RBDMS Program, an Environmental/Information Management Suite, or EMIS.

At the Ohio Division of Oil and Gas, we are charged with the regulatory responsibility over Ohio's oil and gas laws and rules. Our mission is to ensure the protection of public health, safety and the environment while providing for the orderly development of oil and gas resources. Of paramount importance within our regulatory responsibility is the protection of ground water resources.

The Ground Water Protection Council is governed by 20 representatives of state oil and gas agencies, and state ground water agencies. The GWPC also invites as ex-officio participants, industry representatives, environmentalists, and the public. Through its members, GVRC, promotes the protection of water resources through the use of best management practices, conservation policy development, education and research to protect ground water as well as remediate contaminated ground water.

In 1996, the Ohio Department of Natural Resources was moving from a mainframe environment of data management to a client server environment. Through our partnership with the members of the GWPC, we were introduced to the Risk Based Data Management System (RBDMS) and, in 1996, received state capital improvements funding and GWPC funding to customize RBDMS for Ohio.

Since we went "on-line" with RBDMS in July of 1997, Ohio has issued in excess of 4,500 permits to drill and plug oil and gas wells, processed the transfer of ownership of 8,000 wells, and registered 750 wells owners. All of our oil and gas well data management, permitting and bonding responsibilities are maintained through RBDMS and are available to anyone with a personal computer.

With significant downsizing experienced within our Division in the 1990s (50+ percent) and the oil and gas industry, we needed a very easy-to-use database our staff, oil and gas industry, and consultants could use in order to meet our statutory obligations and expectations of our customers. RBDMS has proven to be easy to use and adaptable to Ohio's data management needs.

In 1998, the Division of Oil and Gas developed a CD-based version of RBDMS that can be updated via the Internet. The CD-based RBDMS provides the oil and gas industry with a "self-help" mechanism to acquire and maintain an accurate oil and gas well database. This easy access to oil and gas well data is providing a cost-saving mechanism for Ohio's oil and gas well owners and others to conduct business as efficiently as possible in our state.

With my testimony, I have included letters/E-malls of support we have received from Ohio's RBDMS users. This support reflects the use by large Ohio independent producers (3000+ wells owned), small producers (50+ wells) and consultants. Both the regulators and the industry they regulate have benefited from RBDMS.

We would like to thank the Committee for the previous support of RBDMS. This support has enabled Alaska, Montana, Nebraska, Mississippi, North Dakota, Alabama, Utah, New Mexico, Kentucky, Michigan, Kansas and New York to install RBDMS. To date, state expenditures account for in excess of 50 percent of the funding for RBDMS development and implementation. This depicts the states commitment for development use of RBDMS across the nation. Continued funding for RBDMS would allow for additional state installations, basic support to the states with RBDMS, and the development of GIS (Geographic Information System) as a RBDMS add-on which would enhance its use by the general public.

Another measure of the RBDMS success is its nomination by the U.S. Department of Energy to receive "The Energy 100 Award," honoring the 100 best scientific and technological accomplishments since the formation of the USDOE in 1977.

Thank you for the opportunity to appear before you today and for your consideration of continued funding for an already very successful multi-state initiative coordinated through the GWPC.

PREPARED STATEMENT OF THE VILLAGE OF WEEDSPORT

EPA RURAL WATER TECHNICAL ASSISTANCE AND GROUND WATER PROTECTION

Good morning Chairman Walsh and Members of the Committee. My name is John O'Connell. I am the superintendent of Public Works for the Village of Weedsport, a small New York municipality serving 750 homes. I am also on the Town Council of the Town of Sennett, New York.

Our New York Rural Water Association and the other state rural water associations greatly appreciate the funding that you provided last year.

My message today is that we believe the funding for rural water technical assistance and small community groundwater protection is the most effective use of EPA funds you appropriate from the drinking water program. Each year this subcommittee approves hundreds of millions of dollars for the EPA to increase the regulatory burden on small towns. In turn, EPA increases the number and stringency of the regulations, passing billions in compliance costs onto our small towns.

Much of this effort is misdirected because improving drinking water in small communities is more of a RESOURCE problem than a REGULATORY problem. Every community wants to provide safe water and meet all drinking water standards. After all, local water systems are operated by people whose families drink the water every day, who are locally elected by their community, and who know, first-hand, how much their community can afford.

Numerous studies have concluded that a majority of non- compliance with EPA regulations is not due to actual water contamination, but is caused by the complexity of the regulations. Also, studies by the National Rural Water Association and EPA have shown that small towns will quickly remedy any water problems when provided understandable education and additional resources. More regulations won't help poor communities which can't afford the current regulatory regime, much less a new set of regulatory hurdles. What works in small towns is providing commonsense assistance in a form they can understand and afford. It takes someone sitting down with them evening after evening, and working with them through the ENTIRE process. Giving them a copy of the federal register and a phone number to call is not helping. Attached is a list of the over one thousand on-site visits carried out in the State of New York last year. A similar list is provided to the other Members of the Committee for their states.

Each time we help a community we educate them on their resources so that they can solve their problem on their own next time. THIS IS KEY . . . ENCOURAGING LOCAL responsibility and building local know-how. If the community does not accept and support measures to protect their water, no amount of regulation will protect it. The TA program promotes this kind of local initiative.

The need for technical assistance is increasing with the dramatic increase in new federal regulations including: consumer confidence reports, radon, ground water rules, operator certification, source water protection, disinfection byproducts, etc. Our rural water technical assistance staff will get thousands of the calls for help from each of these regulations. (attached is the EPA's schedule for additional regulations)

When local communities take responsibility for protecting their environment they do it more effectively and economically than governmental regulations. This has been documented in our groundwater/wellhead protection program's rapid expansion to small communities all over the state in the last four years, a list of affected communities is attached to my testimony. My reason for pointing this out is that we are facing the same challenge in source water/non-point source pollution in rural areas.

As the Congress provides additional EPA funding (under the Safe Drinking Water Act and the Clean Water Action Plan) for source water protection, clearly we need a grassroots source water protection effort that will do for source water what the grassroots groundwater protection program did for groundwater. To this end, we urge you to support transferring EPA funds to a rural water source protection program to be operated through the USDA Natural Resources Conservation Service (NRCS). Last year Congress provided $1.5 million for an innovative grassroots source water protection program. We urge you to again provide this funding and to specifically designate it to be transferred to the NRCS program under authorities in Clean Water Act. This will ensure a bottom up, locally supported alternative to expanded federal regulations.

Mr. Chairman, I will close with our request that the Committee include $8.8 million in the EPA's budget for all state rural water technical assistance and our groundwater protection initiatives and to again provide $1.5 million for an innova-

tive grassroots source water program. Thank you for your past support and the opportunity to appear before you today.

PREPARED STATEMENT OF STATE OIL AND GAS BOARD OF ALABAMA

Mr. Chairman, thank you for the opportunity to provide testimony. My name is David Bolin, I am Past President of the Ground Water Protection Council (GWPC) and the Assistant Oil & Gas Supervisor for the State Oil and Gas Board of Alabama. My agency is a typical member agency in the Ground Water Protection Council. We are responsible for the environmental safeguards related to oil & gas exploration and production. Many of us are also responsible for state ground water and surface water protection programs. Through the GWPC, my agency and the other states work together to protect ground water resources while reducing the cost of compliance to industry.

We feel that GWPC's mission reflects the future of environmental protection: that we regulators must form partnerships, together with industry and local government, to protect the environment. This is the alternative to a command and control regulatory model, which we feel often results in unintended consequences, like unnecessary cost to industry and local government. Neither of these consequences help protect our environment nor effectively utilize limited resources.

In addition to expressing the state governmental agencies' appreciation for your assistance last year, Mr. Chairman, I would like to emphasize one main point today—that success in implementing the Safe Drinking Water Act's source water protection program, AND the Act's oil and gas exploration programs depend primarily on state government agencies like mine. And because we are the keys to success and workability of these two EPA-delegated programs, we urge the Subcommittee to look at increasing funding to innovative state programs as an alternative to expanding the federal programs.

We urge you to include $550,000 in the fiscal year 2001 EPA's Budget for the Ground Water Protection Council. This proposed funding would be used for environmental initiatives essential to protecting states' natural resources and compliance with EPA requirements.

GWPC has been the only organization providing objective assessments of hydraulic fracturing, a commonly used method of coal bed methane production. This historically safe and non-controversial practice has been the focus of environmental lawsuits questioning state programs. States are relying on the continued technical assistance, development of best management practices, and scientific analysis of hydraulic fracturing by GWPC to settle this controversy. This assistance and scientific assessment is critical to the future of safe oil and gas industry injection practices including hydraulic fracturing. State oil and gas agencies strongly feel that GWPC is uniquely qualified to provide this service.

Another federal program where GWPC is providing exclusive technical assistance to all states is the Class V underground injection control program. This year, EPA began enforcement of the federal ban on any new motor vehicle waste disposal wells (septic systems) and large capacity cesspools. These shallow wells are typically owned by very small businesses. GWPC is providing technical and public outreach/assistance to the states so they can enforce these rules, while at the same time minimizing the harm to small local business owners.

An example of environmental innovation is GWPC's proposal to provide states with a data system that helps them comply with the 1996 Safe Drinking Water Act's requirement for source water protection plans. Using funds provided by Congress last year, we developed a data system that many states will use as the core of their source water program. There is no other data system being developed by EPA or anyone else to assist the states.

This year we are urging the committee to support funding to provide the core database to additional states. We are requesting less funding this year because a significant portion of last year's funding was used to develop a pilot system. The system is up and working in Oklahoma (the first state) and accessible over the Internet. Oklahoma's information system will allow the state to:

—Comply with EPA requirement for state source water assessmentprogram under the Safe Drinking Water Act;
—Provide the public with a useable environmental source water protection tool;
—Provide local governments and environmental planners access to al state (and EPA) data of regulated entities (Superfund, Clean Water Act, RCRA, etc.)
—Provide water systems' Consumer Confidence Reports via the Internet.

The Other states that plan to implement the system in the next year include: Ohio, Illinois, New Hampshire, Nebraska, Nevada, among others.

In closing, on behalf of all the GWPC state members, I would like to thank you for your help last year including funding for our priority source water and drinking water protection requests and ask for your support again on these state environmental priorities.

PREPARED STATEMENT OF COLORADO STATE UNIVERSITY

Mr. Chairman, Members of the Subcommittee, my name is Judson M. Harper. I am Vice President for Research and Information Technology at Colorado State University, located in Fort Collins, Colorado. I appreciate this opportunity to submit my testimony for the record of proceedings on the fiscal year 2001 Budget for the Environmental Protection Agency. I would like to testify in support of the budget request for funds related to carbon sequestration mitigation strategies and take this opportunity to inform you of the ongoing work in this field being conducted by the Consortium on Agricultural Soils Mitigation of Greenhouse Gases.

The Consortium for Agricultural Soils Mitigation of Greenhouse Gases (CASMGS) includes Colorado State University, Texas A&M University, Iowa State University, the University of Nebraska, Kansas State University, Michigan State University, Montana State University, The Ohio State University and Battelle-Pacific Northwest National Laboratory. These institutions have been working individually and collectively for the past few years in the fields of soil carbon dynamics, soil-derived greenhouse gases, soil erosion, water quality and computer modeling, land resource data analysis, agricultural resource economics and integrated assessment.

The Administration's Budget for the Environmental Protection Agency proposes $227 million for the third year of the Climate Change Technology Initiative, focusing on reducing greenhouse gas emissions. We support these initiatives and feel prepared to partner with the federal government in reaching its objectives.

The goal of CASMGS is to provide the tools and information needed to successfully implement soil carbon sequestration programs intended to lower the accumulation of greenhouse gases in the atmosphere, while improving the soil and providing income and incentives to farmers. Specifically, the Consortium will:

—Produce national inventories of all major greenhouse gas fluxes from soils.
—Provide measurement and modeling tools for quantifying and verifying soil carbon sequestration rates to support carbon dioxide emission credit or trading schemes.
—Provide integrated assessment models to evaluate alternative national and global economic and policy strategies for carbon sequestration. These models will provide insights on the impacts of such programs on crop production potential, food security and environmental quality.
—Provide a standing capability to meet the short-term needs of Federal agencies, Congress and the White House, for information, data and analysis on issues relating to soil carbon sequestration and soil greenhouse gas emissions.
—Participate in the transfer to and adoption of technology by other countries for quantifying and verifying carbon sequestration rates.
—Provide information to each of the stakeholder groups: policymakers, agricultural sector, energy and transportation industries, the scientific community and the general public, through annual and special reports, scientific and trade journals, popular publications and an internet website.

With seed money received in 1999, CASMGS has been developing an assessment tool to help evaluate potential government policy options for carbon sequestration at the national level. Additionally, CASMGS is testing and validating the Century ecosystem and EPIC models for improving predictions of carbon sequestration rates. Century was developed by members of CASMGS and is the most widely-used model of soil carbon and nutrient cycling, world-wide. EPIC estimates soil erosion, water quality, soil nutrient dynamics, yields and economics for different agricultural management systems and policy scenarios. Funding provided by this Committee in fiscal year 2000, is being used to continue the policy analysis and to synthesize current research results by CASMGS scientists, making it available for use by government agencies.

The work of the Consortium is important to the goals of the Environmental Protection Agency to reduce greenhouse gas emissions. I am hopeful that this Committee will continue to recognize the contributions already being made by CASMGS and continue to make funding available to support its research and development activities.

PREPARED STATEMENT OF THE NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS

The National Association of Conservation Districts is the nonprofit, nongovernment organization that represents the nation's 3,000 conservation districts and more than 16,000 men and women who serve on their governing boards. Established under state law, conservation districts are local units of state government charged with carrying out programs for the protection and management of natural resources at the local level. Conservation districts work with nearly two-and-half million cooperating landowners and operators each year and provide assistance in managing and protecting nearly 70 percent of the private land in the contiguous United States.

Since the passage of the 1972 Clean Water Act, tremendous strides have been made in cleaning up point sources of water pollution such as industrial and municipal wastewater discharges. The progress in treating point sources has been made possible, in large part, by an investment of more than $100 billion in federal funds for the construction of municipal wastewater treatment plants. Nonpoint sources of pollution—runoff from cropland, construction sites, mining activities, lawns and city streets—are much more elusive targets and pose significant obstacles to achieving the nation's water quality goals. Pollution prevention remains the key to effectively dealing with nonpoint source pollution.

Section 106 of the Act authorizes funding to assist state and interstate agencies in administering programs to prevent, reduce and eliminate water pollution. The President's budget request calls for a $45 million increase in Section 106 for a total of $160 million in fiscal year 2001. These funds would be used to focus on the listing of impaired monitoring, assessments and development and implementation of Total Maximum Daily Load (TMDL) programs. Conservation districts support the President's request.

When Congress enacted Section 319 in the 1987 amendments to the Act, it recognized that nonpoint source pollution control is best addressed through state and locally driven cooperative, incentive-based management programs. With federal assistance and state matching efforts, Section 319 state management programs have resulted in considerable progress in controlling nonpoint source pollution. Some 38 states have also established companion agricultural nonpoint programs that provide technical and financial assistance to farmers and ranchers to help them implement conservation practices that stem runoff.

Although progress has been made, changing rules and regulations and lack of adequate funding are the primary obstacle to addressing the nation's nonpoint source pollution control problems. Further, in addition to the already overwhelming need for technical and financial assistance, the joint EPA–USDA Unified National Strategy for Animal Feeding Operations (AFO) calls for the voluntary development of comprehensive nutrient management plans (CNMPs) for some 450,00 agricultural operations that confine animals but that are not subject to the National Pollutant Discharge Elimination System permit program. While the strategy recognizes that voluntary, incentive-based programs are the key to restoring and protecting the nation's waters, it creates a tremendous new workload for states to provide assistance to producers in developing the CNMPs. Estimates of the number of staff years needed at the field level to assist farmers and ranchers in this endeavor range as high as 8,000 FTEs. The existing staff available from NRCS, states and conservation districts cannot handle the current workload.

In fiscal year 1999 Congress recognized this issue by nearly doubling funding for EPA's Section 319 grants to states program to $200 million. This figure remained level in the fiscal year 2000 budget. The President's budget request for fiscal year 2001 seeks an additional $50 million for Section 319 and includes allowing states to use up to 20 percent of their allotments to develop and implement TMDLs. Given the rapidly increasing workload in addressing animal waste issues, conservation districts believe that level is still inadequate and recommend a funding level of at least $300 million for the Section 319 grants to states program.

Over the past two years, conservation districts and the Natural Resources Conservation Service have conducted a national workload analysis to determine what our conservation needs are relative to the resources we have to address them. The results have been shocking—even to us. Data show that, at a minimum, we need an increase of $300 million in technical assistance funding alone.

Conservation districts also support the initiative begun last year to allow states to reserve up to 19 percent of their Clean Water State Revolving Fund Grants (CWSRF) for use as grants for nonpoint source pollution control and estuary management. However, the President's budget request again this year proposes to cut funding for the program by $550 million, which conservation districts believe is a

step in the wrong direction. At the very least, funding for the CWSRF program should be maintained at the fiscal year 2000 level of $1.35 billion.

Congress recognized long ago that the Great Lakes are a national treasure and has passed specific legislation, the Great Lakes National Program (GLNP), to protect them. The President's budget proposal provides a significant increase over the current funding level of $13.6 million. In fiscal year 2001, GLNP would receive a significant boost to $67.3 million: $17.3 million from the Environmental and Programs Management account and $50 million from the State and Tribal Assistance Grants (STAG) account million. The additional funding from the STAG account will be targeted to a state and municipal competitive grants program to improve water quality through stormwater pollution control, wetlands restoration and contaminated sediment remediation. Conservation districts support this expanded Great Lakes water quality initiative.

In addition to its water quality and other programs, the President's budget initiative again proposes a new undertaking called the Better America Bond (BAB) program. The BAB provides $2.150 billion in bonding authority in fiscal year 2001 to help communities preserve green spaces, protect water quality and clean up abandoned industrial sites (brownfields). Much of the program will be aimed at obtaining easements for those purposes. Since easements are voluntary and often accomplish significant conservation purposes, conservation districts support the Better America Bond program.

Specific recommendations for funding other selected EPA water quality programs are outlined in the table below.

FISCAL YEAR 2001 RECOMMENDED APPROPRIATIONS FOR SELECTED PROGRAMS OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS, APRIL 2000

[In millions of dollars]

	Fiscal year				
	2000 Admin.	2000 NACD	2000 Enacted	2001 Admin	2001 NACD
Environmental Protection Agency:					
State Programs Grants	115.500	120.000	115.530	160.530	160.530
NPS Control Grants (319)	200.000	300.000	200.000	250.000	300.000
Water Infrastructure	800.000	1350.000	1350.000	800.000	1350.000
Drinking Water Infrastructure	825.000	825.000	820.000	825.000	825.000
Great Lakes National Program	13.367	16.000	13.600	67.3000	67.300
Gulf of Mexico Program	4.300	7.300	4.300	4.020	7.300

PREPARED STATEMENT OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

The Environmental Engineering Division (EED) of the Council of Engineering, American Society of Mechanical Engineers (ASME International), is pleased to have this opportunity to provide written comments on the fiscal year 2001 budget request for the Environmental Protection Agency (EPA).

ASME International is a worldwide engineering society focused on technical, educational and research issues. It sets many industrial and manufacturing standards, and holds several technical conferences and professional development courses each year. This testimony represents the considered judgment of the ASME Environmental Engineering Division, and is not necessarily a position of ASME as a whole. The ASME Environmental Engineering Division promotes the art, science and practice of environmental engineering in all issues pertaining to the environment. Its members are engaged in a broad range of environmental engineering areas, including air, water and waste management.

BACKGROUND

Mechanical engineers have a long-standing professional interest in engineering, research and technology to protect the environment and human health.

The EPA plays an essential role in the nation's efforts to protect human health and to safeguard the natural environment. Protection of the environment is defined as actions that directly or indirectly protect human health and ensure that other living species are not endangered. Accordingly, research and development (R&D) in environmental protection includes environmental health, ecology, environmental monitoring, environmental technology, pollution prevention, and related topics.

In 1996, the EPA established a Science and Technology (S&T) budget to fund those programs within the Agency that provide significant scientific, engineering, and technical expertise in meeting the Agency's broad array of environmental goals. The majority of the fiscal year 2001 S&T budget request, $492.5 million of the $674.3 million total, is allocated to the Office of Research and Development (ORD). ORD administers programs across two broad categories: problem-driven research to solve environmental problems of high risk and high scientific uncertainty; and, core research to improve the underlying scientific tools for understanding and protecting human health and the environment.

RECOMMENDATIONS

ASME's EED believes that responsible public policy is predicated upon sound science. Policy makers benefit from the counsel of highly trained scientists and engineers on how best to incorporate "best practices" into legislative and regulatory directives. To ensure that the Agency's research and policy agenda continue to be founded on sound science, today's students and researchers need to be encouraged to participate in cutting-edge research.

Science Advisory Board (SAB)

EPA is requesting $2.7M, a reduction of $0.2M, to fund its Science Advisory Board in fiscal year 2001. The EPA, through its SAB, prioritizes research areas using risk and other factors. The Agency also provides technical advice to Congress and establishes its research priorities based on requests from Congress. The SAB promotes sound science and gives direction on methods to incorporate science appropriately.

ASME's EED supports the March 1999 findings of the SAB's Research Strategies Advisory Committee (RSAC) that encourage EPA to:

—"strengthen its strategic planning processes to fund the longer-term research on critical environmental issues that transcend the year-to-year budget framework . . .;

— "establish a mechanism to identify emerging issues . . . because emerging issues often form the basis for future research and science and technology programs . . .; and,

—"move forward with evaluations of research programs by environmental outcomes rather than outputs".[1]

ASME's EED believes that EPA needs to continue to prioritize its research agenda, focusing on necessary research and developing a process to justify terminating research on those issues that are or have become low risk.

Science to Achieve Results (STAR) Grants Program

EPA created the STAR grants program six years ago to encourage the nation's best scientists to participate in the ORD research program. STAR complements the ongoing work in ORD laboratories, providing an opportunity for professors, students and researchers to focus on the Agency's priority issues. To date, there are more than 500 active grants in 49 states, Puerto Rico, Guam and the District of Columbia. Additionally, approximately 100 fellowships are awarded yearly for graduate study in environmental fields to prepare the next generation of scientists, industry professionals and government officials for the challenges of the future. ASME's EED supports the request of $107.3M to continue the STAR Grants Program in fiscal year 2001.

ASME's EED strongly endorses EPA's programs that advance government and industry partnerships. ASME is a strong proponent of industry/government partnerships as a means of fostering technical innovation and leveraging resources to achieve desired outcomes. Within the context of the fiscal year 2001 budget request for ORD, ASME's EED supports the following partnering initiatives:

Clean Air Partnership Fund

The fiscal year 2001 budget request for the Clean Air Partnership Fund of $85M would provide technical support to communities to clean the regional air through innovative local, state and private partnerships. The Fund would demonstrate smart multi-pollutant strategies that reduce air toxics, soot and smog, as well as greenhouse gas emissions, to protect the nation's health and climate. Currently, businesses and municipalities often invest in short-term single pollutant control approaches. In contrast, the Fund would encourage industry to further reduce greenhouse emissions by pursuing comprehensive pollutant reduction while improving energy and operational efficiencies.

[1] An SAD Report: Review of the Fiscal Year 2000 Presidential Science and Technology Budget Request for the Environmental Protection Agency, Science Advisory Board, March 1999, p. 4.

Design for Environment

EPA's fiscal year 2001 request for the Design for the Environment Program is $4.9M, an increase of $0.2M over the fiscal year 2000 level. This program provides industry with performance, cost and comparative risk information about alternative technologies and processes in order to facilitate environmentally informed decisions. Private sector partnerships enable EPA's techniques to be combined with industry specific expertise in production and process design.

Environmental Technology Verification (ETV) Program

The fiscal year 2001 request for the Environmental Technology Verification program is $6.7M, an increase of $0.3M. This program, which enjoys support from industry and other federal partners, will continue to test the performance of commercially ready technologies. Broader testing is needed on innovative technologies. Industry programs serve as incubators to test new commercial technologies.

Hazardous Waste: Superfund Innovative Technology Evaluation (SITE)

The Agency's fiscal year 2001 request for SITE is $5.9M, a reduction of $1.1M. SITE treatment research includes bioremediation, abiotic treatment and natural attenuation. Evaluations are conducted on biotreatment and chemical treatment and, dense nonaqueous phase liquid (DNAPL) extraction techniques are compared for effectiveness. Field tests on permeable reactive barriers are ongoing. Containment systems are being improved with new materials and methods. The SITE program promotes innovative technology and evaluates the effectiveness of pilot tests.

Whether or not carbon emission reductions will ultimately be required to address global climate change, ASME believes that the United States has an obligation to continue prudent and cost-effective measures to promote carbon sequestration. Government and industry must work together to develop new renewable and non-renewable advanced energy technologies to maximize carbon reductions. Such technologies could result in reducing the cost of achieving carbon reductions and in the development of marketable new products. ASME's EED supports ORD's ongoing research in the areas of climate change that advances this approach:

Climate Change Initiatives: Transportation

The fiscal year 2001 request for the Climate Change Initiative: Transportation is for $65.0M, an increase of $35.4M over the current budget. The Partnership for New Generation of Vehicles aims to develop new technologies for vehicles. The National Academy of Sciences has determined that EPA's renewable fuels application for a four-stroke direct injection engine is the lead candidate technology. The design provides concepts for commercialization and innovation and will serve as the basis for additional research into technologies for light and heavy-duty truck applications.

Climate Change Research

EPA's fiscal year 2001 request for Climate Change Research is for $22.7M which represents an increase of $2.2M over fiscal year 2000. EPA has been working with industry to reduce potential emissions of global warming gases to achieve significant reductions of carbon dioxide equivalent metric tons. Deployment of advanced technologies could result in substantial reduction of greenhouse gas emissions. EPA is working in program design and start up programs. The Climate Wise program is working with industry to make the purchase or generation of renewable power a key element of the Action Plans over the next five years. A combined heat and power initiative will reduce carbon emissions by increasing the capacity of U.S. combined heat and power systems. EPA will identify and eliminate the regulatory and institutional barriers that are currently preventing more rapid dissemination of this technology.

CONCLUSION

Because of the complex nature of environmental issues, it is essential that EPA base its policies and recommendations on sound science. A strong R&D program is critical for the on-going development of that scientific based decision-making. ASME's EED supports:

—ORD's program that advances government and industry partnerships, e.g., Clean Air Partnership Fund, Design for the Environment and Environmental Technology Verification Program;

—a substantial increase in funding for R&D that will lead to reduction in carbon emissions; and,

—on-going programs to assure that EPA's research and policy programs are based upon sound science.

We look forward to the EPA's evaluation of past programs in its performance report to Congress. Assessing progress in R&D is challenging; however, assessing the quality of methodologies, planning and scope of research is done routinely. Funding of programs such as those discussed above should be based on clearly state programmatic objectives, as well as on a system of metrics to measure their effectiveness or success. A report detailing the progress or success of each program to date should be included with the annual budgetary request. Unfortunately, such information was not available to the EED for purposes of this review.

ASME International's Environmental Engineering Division appreciates the opportunity to present its view to the Appropriations Subcommittee on VA, HUD and Independent Agencies.

ASME International is a non-profit technical and educational organization with 125,000 members worldwide. The Society's members work in all sectors of the economy, including industry, academia, and government. This statement represents the views of the ASME Environmental Engineering Division, Environment and Transportation Group, Council on Engineering, and is not necessarily a position of ASME as a whole.

PREPARED STATEMENT OF THE NATIONAL TREASURY EMPLOYEES UNION

Chairman Bond, Ranking Member Mikulski, and distinguished Members of the Subcommittee, my name is Colleen Kelley, and I am the National President of the National Treasury Employees Union. The NTEU represents more than 155,000 federal employees, including many of those who work at the Environmental Protection Agency. I appreciate this opportunity to present testimony to you today on behalf of the men and women who help ensure our waterways are swimmable and fishable, our drinking water is free of harmful toxins, our air is breathable, and any polluted lands are made clean again. The actions of this subcommittee directly affect their lives and the livelihoods of every American.

Whether it's cleaning up already contaminated lands and waterways, or taking pro-active measures to prevent future pollution or contamination, EPA employees are working to reduce the risks to the American public and our environment. If we are to continue our nation's progress in reducing pollution and cleaning up the environment, then we need to ensure that EPA has the staffing and resources it needs to effectively carry out its mission.

As we stand here today in the Spring of 2000, the dawn of the 21st century, we need to ask ourselves what the state of the environment of this great nation will be at the dawn of the next century. Are we going to put the brakes on environmental progress? Are we going to accept that we have reached the pinnacle of scientific innovation and that there is no more to learn about how we can best go about cleaning up after environmental mistakes of the past and preventing similar mistakes in the future?

I think we can all agree that we owe it to future generations of Americans to leave them with a clean environment. We are all stewards of the earth, and of our natural resources, and as such, we should continue to foster science-based innovation and public policy that protects the public health and our environment. One of the best ways we can go about this is by supporting a strong budget for the EPA. The scientists and analysts at the EPA are the ones who have years of expertise in these critical areas, and they are the ones who are in the best position to foster environmental progress.

I am pleased that the President has requested an 11 percent increase in funding for the EPA's core operating programs for fiscal year 2001. President Clinton's proposed fiscal year 2001 budget of $7.3 billion for the United States Environmental Protection Agency and $2.2 billion for the Better America Bonds program will go a long way in supporting EPA's essential operations to provide cleaner air, fresher water, safer food and sound science. The budget will support increased staffing in these areas so that we can continue to make progress in protecting the public health and the environment for all Americans and their communities.

We cannot expect the EPA to continue to protect the public health without the staffing and resources necessary to do the job. We need to increase funding for core EPA environmental programs such as researching and setting environmental standards, ensuring enforcement and compliance of our environmental laws, and providing assistance to our states and municipalities. I believe that the EPA budget request for fiscal year 2001 is a good first step, but I believe that the level of funding requested by the EPA should be viewed as a floor, not a ceiling. As the number and complexity of threats to our environment and to human health continue to increase, it is critical that the Congress provide additional funding for staffing at the

EPA. While I believe that funding should be used to make technological improvements in EPA programs as well, and I applaud this subcommittee's commitment to this area, I am sure you will agree with me that technology alone cannot possibly address the demands the agency now faces.

The budget proposal before you will allow EPA employees to continue working with states and localities to develop proposals to restore wetlands and to clean up our polluted rivers and lakes. The budget will support EPA efforts underway with industry and municipalities to modernize our drinking water systems. It supports ongoing research into children's vulnerabilities to exposure to lead and other harmful toxins. The budget will help ensure our food supply is safe by providing funds to develop alternatives to harmful pesticides. And the budget provides funds to clean up our Superfund and brownfield sites and restore these abandoned industrial sites to productive economic use. These are only a sampling of the many programs administered and implemented by the dedicated men and women who work at the EPA. These programs, as well as countless others within EPA need additional staffing to address the increasing demands of protecting and improving the health of the American public.

NTEU supports the budget request of $68 million targeted at protecting the health of our children. The EPA has some of the best-trained and most experienced scientists in the world researching and conducting sophisticated tests to determine the effects of lead and other toxins on children. They are working to develop new standards and new techniques to better protect children and our most vulnerable members of society from environmental dangers. Among other things, the budget supports ongoing research efforts into the effects of air pollution on children with asthma. It targets $75 million for the implementation of the Food Quality Protection Act, which sets food safety standards designed specifically to protect our children. And the budget continues research efforts directed toward finding alternatives to those pesticides most harmful to our children.

The budget provides $784 million for President Clinton's Clean Water Action Plan. This funding will allow the EPA to continue to work with other federal agencies, states, and local communities to improve environmental protections for our lakes, rivers, and waterways throughout this country. EPA scientists are constantly working to develop new techniques to make our waterways clean enough for drinking, fishing, and swimming. The funds administered by EPA employees will help reduce polluted runoff into our waterways, and will provide grants to enable water districts to find more cost effective and efficient ways to deliver even cleaner drinking water to our residents. The American public rightfully expects that their drinking water will be clean and the fish they eat from our lakes and bays will not be contaminated. They depend on this subcommittee and the Congress to give EPA employees the tools they need to establish strict water quality standards and to ensure that these standards are being met.

The President's budget provides $1.45 billion for the Superfund program to continue the cleanup of the nation's most polluted toxic waste sites. Hundreds of Superfund sites nationwide have been cleaned up since the program's inception. Thanks to the work of EPA analysts and lawyers, polluters have been forced to pay for their neglect of our environment, and communities have been able to develop more cost effective means to clean up the sites. The budget also invests $92 million in cleaning up our slightly less contaminated, but still highly toxic, brownfield sites. The new budget proposal will continue EPA's progress in helping our communities clean up these lands, put them back into productive economic use, and create more jobs where we most need them.

The EPA has also taken successful actions to provide cleaner, healthier air for all Americans including setting the toughest standards ever for reducing harmful air pollution. Often times, these actions have come under fire by certain industry groups, but because the EPA actions have always been backed up by extensive research and sound science, the EPA has been able to prevail in courts and prevail in public media battles. The result has been reduced air pollution, increased pollution prevention efforts, and a decrease in the number of pollution-related illnesses and deaths. Under the 2001 budget, the President is requesting $215 million to continue to support partnerships with states, tribal governments and local communities to collectively work to improve air quality across the nation. In addition, the President has requested $85 million for the Clean Air Partnership Fund, which will help strengthen these partnerships, help foster local innovation and investment, and bring the most creative and most successful ideas for cleaning the air to communities where they are most needed. NTEU supports these EPA initiatives.

Finally, we are also very supportive of the President's budget request of $30 million for the Information Integration Initiative. This initiative will expand the public's right-to-know through the development of an information network with the

states to ensure that key environmental information will be made public in a timely manner through the internet and other means. This will help localities improve their decision-making, will reduce the burden of paperwork on the regulated community and the states, and will guarantee the taxpaying public reliable, high quality information about what threats to the environment exist in their communities, and what steps are being taken to address these threats. NTEU believes that not only do the American people demand to have this critical information at their fingertips, they also demand that their tax dollars are being spent to continue to expand the science base at the EPA so that we can better mitigate and prevent these environmental threats.

The work performed by the men and women at the EPA is often taken for granted. Yet thanks to persistent science-based work by EPA employees, we are reducing air pollution, improving the quality of our drinking water systems, and allowing Americans to live longer and healthier lives. EPA employees are working with states and local communities to build on initiatives that get results and shelve those that have failed. And EPA scientists, analysts, lawyers, and others who have dedicated their lives to serving the public at the EPA continue to work to find the most cost effective and most efficient solutions to addressing our country's greatest environmental threats. And while we should continue to support technological advances in reducing pollution and cleaning up our environment, technology alone cannot clean up every lake, every Superfund site, or every particle of toxic matter in our air. Technology needs to be supported by sound science and by sound public policy. Science-based regulations need to be implemented, overseen, and enforced by knowledgeable scientists. We know that there are always better ways of doing things—more cost effective and innovative ways—and it's up to this subcommittee and the entire Congress to continue to foster this scientific innovation. Now is the time to build on our science base and expand it so that we can be assured that the planet we leave to our next generation is cleaner and in better shape then the one we inherited from earlier generations.

I would like to thank the Subcommittee again for the opportunity for our Union to present its views on the budget for fiscal year 2001. As you continue your subcommittee's deliberations, I hope you will give special consideration to EPA's dedicated workforce, a team of public servants who have committed themselves to cleaning up our environment and protecting the health of the American people.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

PREPARED STATEMENT OF ELMIRA COLLEGE, ELMIRA, NY

Mr. Chairman, thank you for this opportunity to submit testimony for the record regarding Elmira College's proposed Technology Enhancement Initiative.

Today, unlike any other time in history, we have a substantial opportunity to apply the information age technologies to schools that are so effective outside the classroom for educational purposes. For schools to make the most of this opportunity, they must rethink education from the ground up.

The power of information technologies to reshape education and to ensure the economic and long-term viability of our industries and workforce is already becoming unmistakable. In scattered locations around the country, schools are using state-of-the-art technologies and interactive multi-media to engage students more actively in learning and to teach them skills they will need to thrive in an information based workplace and world. This is particularly true with non-traditional students who have little if any access to traditional classrooms and educational services.

As information age infrastructure is developed, more and more students and teachers will gain access to a global web of information and exchange ideas, services and education globally.

The Internet and other information technologies are bringing interactive instruction to schools in our cities and suburbs. Importantly, the past several years have witnessed a stronger focus on providing those information technologies in rural areas of the country. These technologies are allowing students to build "communities" with their counterparts around the world and create lifelong beneficial links between schools and the communities around them.

Taking advantage of this new capability will require profound changes in the roles of teachers, students and schools. Instead of being the repository of knowledge, teachers will be guides who will help students navigate through electronically accessible information. They will use the new technologies to build networks with each other, with parents and students, with academic and industrial experts and with other professionals.

In order to ensure that students (K–12, undergraduate, graduate, continuing education or professional development students, students in rural areas) receive the full potential of the technology age, the technological access must exist in flexible locations and provide continuous access to their extended communities. Equally as important, teachers must receive extensive training in how to use existing and emerging information technologies and how to design and implement appropriate curricula for a state-of-the-art 21st Century classroom.

To make technology a viable instructional and professional development tool requires schools to have enough computers to provide full easy access for all students including students with disabilities.

Institutions of higher education are central to the national effort to ensure that all students and teachers are equipped to maximize the employment, economic and benefit of today's technology. By providing education, training, and technical assistance these institutions can work in partnership with local school districts, human service agents and professionals to address problems associated with the rapid onset of the information age, including: educational, economic and social infrastructure of their surrounding communities.

Elmira College is an institution of higher education that accepts that responsibility willingly, recognizing the benefit to its students, students in surrounding school systems and community colleges, and individuals in nearby communities in need of continuing education or professional development. As such, it is implementing its "Technology Enhancement Initiative" to address its own and regional educational and technology training needs.

THE "TECHNOLOGY ENHANCEMENT INITIATIVE" AT ELMIRA COLLEGE

As it approaches the 21st Century, Elmira College, in Elmira New York, stands at an important crossroads in the development and expansion of its educational and economic resources. To ensure its continued strength as a four-year institution of higher education the College is proposing the implementation of its "Technology Enhancement Initiative" to relocate and improve its technology infrastructure.

This initiative will address the ever-growing need in the southern tier of New York and northern tier of Pennsylvania for access to higher education, teacher technology education and training and professional development services. It will provide the College the opportunity to expand its technology resources and to meet its own and regional technological and services demands.

Elmira College proposes to establish a partnership with the federal government that will:

—Relocate, consolidate and improve all student and administrative computing services from McGraw Hall, which is handicapped inaccessible, to the Gannett-Tripp Library which is handicapped accessible;

—Upgrade existing "hub" hardware to state-of-the-art technology which will be able to meet and manage the demands of the upgraded system; and,

—Wire every dormitory, classroom and administrative meeting room as well as every faculty, academic, and administrative office building for direct access to the Gannett-Tripp Library, the Steele Memorial Public Library and an interface with the local public library system and with the Internet.

As a result of the improvement to its technological infrastructure, Elmira College will have the opportunity to expand existing and implement several new educational and training programs in partnership with local school systems and human service agencies. Specifically, the initiative will enable the College to:

—Offer access to higher education courses in 12 rural and underserved counties and 21 K–12 school districts (58,308 students), 8 community colleges and a variety of community sites via distance learning;

—Offer access to Elmira College library resources, including the federal depository at the College, at a variety of community sites via distance learning to underserved counties;

—Provide teacher technology education and training both on and off campus;

—Provide expanded professional development and technology education and training services;

—Provide leadership and technical assistance to local K–12 systems in the development of state-of-the-art technologically advanced classrooms and prepare its Education students (future teachers) and regional teachers to teach effectively in this technologically advanced era.

In addition to the obvious educational benefits that the Elmira College "Technology Enhancement Initiative" will have for the College and its students, there are several significant benefits for teachers in the regional community.

As a result of the Technology Enhancement Initiative, Elmira College will have the opportunity to work in partnership with regional school systems to address the education and training needs of their teachers and staff.

Elmira College will work to identify technology education and training expertise in the region and the nation and work with local school districts to develop critical professional linkages needed for the local school system to take full advantage of that expertise for their students.

In addition, as part of its own curricula, Elmira will provide expanded in-depth technology education and training for students in its Masters of Education programs.

The Technology Enhancement Initiative will provide Elmira College the ability to offer these teacher education and training courses through any of its distance learning capabilities to teachers in the classroom, on-site at their own schools, at local libraries, community colleges or even in the home. Graduate students at Elmira will continue their training within the local schools, but will have an increased ability to conduct classroom observations, information exchanges and training as a result of the Technology Enhancement Initiative.

To do so, the College will expand existing and implement new education, training and professional development programs, including courses such as Computers in Education, Interactive Media for Educators, The Internet for Educators, Video Production for Educators, and Microcomputer Applications for Educators. Finally, it will provide the College with the opportunity to play a leading role in improving the social and economic infrastructure of the region.

The Technology Enhancement Initiative will create an expanded opportunity for cooperation in the provision of higher education courses between Elmira College and local community colleges. It will help those institutions to provide timely and relevant programming at the same time it helps to prevent unnecessary duplication of academic programs and/or courses at Elmira or the community colleges.

As it is proposed, the relocation, expansion, and consolidation of all computing functions at Elmira College will provide three methods of distance learning in the future, including:

—Computer Based Research
—Internet Conferencing
—Compressed Video

Students and professionals in the field will have the ability to access education, training or professional development from home (if the connection exists) from libraries, other designated community sites or from any of the eight sites where Elmira currently provides minimal programming including: Bath; Corning; Ithica; Owego; Penn-Yan; Watkins Glen; Rome; and Syracuse (adult education).

Elmira College will have the ability to share faculty experiences across institutions and establish partnerships on select courses with regional community colleges, including general education courses, courses to support selected major requirements, and coursework providing a valuable supplement to existing offerings. Elmira College currently holds articulation agreements with three regional community colleges that will be expanded as a result of the Technology Enhancement Initiative. Those institutions include:

—Tompkins Cortland Community College
—Corning Community College
—Broome Community College

To enable the completion of this important initiative, Elmira College is seeking $3,399,000 million in federal support. To date, the College has invested $500,000 in campus infrastructure in preparation for the implementation of this initiative (these dollars are not counted as part of the official project cost, but are calculated into the College's contribution). The College is firmly committed to the completion of the project and the implementation of this important and enabling technology infrastructure and therefore will contribute an additional $1 million towards the total cost of the initiative. Total project cost is $5,923,680 million.

Mr. Chairman, this initiative is critical to the long-term viability of Elmira College as well as the regional the K–12, undergraduate, graduate, continuing education and professional development systems in the southern tier of New York and the southern tier of Pennsylvania. We look forward to working with you to secure the final phase of funding for this very important initiative in fiscal year 2001.

Again, thank you for the opportunity to present this testimony for the record.

PREPARED STATEMENT OF FAIRFIELD UNIVERSITY

Mr. Chairman, thank you for again providing me the opportunity to submit testimony concerning an important initiative that Fairfield University is undertaking to ensure the progress of information technology education and training and to provide resources to regional small and medium-sized businesses. The initial focus of the effort is two educationally underserved cities—Bridgeport and Norwalk—in the State of Connecticut and the surrounding business community.

First, I wish to thank you and Members of the Subcommittee for supporting this initiative with a $1.5 million EDI grant in fiscal year 2000. This funding will allow us to begin work on an Information Technology Center (ITC) designed to provide outreach that will enhance the technology skills of primary and secondary school students and adults in and around the cities of Bridgeport and Norwalk. It will also become integral to a major effort by the University to address the needs of regional businesses. As President of Fairfield University, I would like to provide the Subcommittee with a brief overview of the state-of-the-art resources that the University currently has to address the educational and workplace challenges brought about by technology.

As you are aware, constant advances in technology have resulted in an ever-changing workplace environment. This is especially true for the computer industry, where the Labor Department estimates that an average of 95,000 new computer scientists, systems analysts and programmers will be needed every year from now until 2005. As a result, studies have indicated that to ensure national economic growth into the millennium we must prepare our school systems to meet the demands of the technological era by providing cutting-edge skills at the primary and secondary level. In addition, educational programs must also be developed at the collegiate level for university students, as well as for returning adult students who need to modernize or enhance their skills.

As Connecticut seeks to address the educational needs of its citizens and meet the workforce needs of employers it must develop strategies for capitalizing on the resources and strengths of its higher education system. Fairfield University, a leading university in Connecticut, has proposed a solution to meet the occupational needs in its State for the 21st century. The proposal involves the utilization of an existing state-of-the art telecommunication infrastructure that will provide the resources necessary to encourage collaborative teaching and learning—especially the study of how best to integrate technology into the curriculum. The resources to be provided in the ITC include facilities for distance learning, video conferencing, computer lab workstations for training, a faculty resource lab, a multimedia lab, an electronic classroom, and digital resources for businesses. With these resources and through the development of special programs, the proposed ITC will become a major training and information center that will enable the University to expand its services to the surrounding communities and beyond.

There are three major audiences who are potential partners for the ITC—including community agencies, schools, and small to medium-sized businesses. The program proposed for these audiences is unique for a number of reasons. First, the ITC will provide technical education and training for primary and secondary school students and teachers in local urban public schools who have historically not received extra support for basic and advanced technical skills and training. While school funding at the local level remains scarce, this program will assist public schools in advancing the skills of the children without impacting budgets. Second, the Fairfield telecommunication infrastructure is unique in its ability to provide technical training through the creation of its convenient satellite learning programs. This is especially important for returning adult students who need to modernize their skills in order to be competitive in the contemporary workplace. Recent State of Connecticut employment cutbacks in the banking, insurance, and manufacturing industries have produced alarming unemployment rates among highly trained workers. The University is prepared to meet the challenges posed by this problem through satellite learning programs that will train these workers so they can re-enter the workforce. In addition, the satellite learning programs will target members of the community who have little or no technical skills, so they also can pursue successfully technical careers.

The benefits of satellite learning programs from Fairfield University are thus twofold: The programs will decrease recent State unemployment rates among highly-skilled workers, and concurrently provide better job security for the low-skilled and low-income wage earner. The primary focus of these collaborations will be with community agencies, secondary education and business/industry. The proposed relationships can reduce high school dropout rates by infusing added resources and exper-

tise into the school system, and can increase the caliber and breadth of job-training opportunities for local industry.

Telecommunications technology is the vehicle through which institutions of higher education can provide broader educational access to the community. Students, educators, parents, senior citizens, and the unemployed are just a small sampling of the potential beneficiaries of on-line training sites throughout the community. Proposed outreach programs for the targeted audiences will include "Train the Trainers" sessions for community agencies and local town government personnel. School district personnel will be able to utilize the ITC for similar faculty training programs or utilize the proposed distance learning conference room for delivery and retransmission of satellite downloads for K–12 programs. Small to medium-sized businesses will utilize the conference space to host technology-related meetings and conferences and tap into the University's extensive business resources that are in the process of being digitized.

Fairfield University currently possesses a singular, award-winning resource that can bridge the gap and help accomplish these goals. An already established state-of-the-art telecommunications infrastructure consists of a fiber system that reaches every computer in every classroom, faculty office and student residence hall. In total, 23 campus buildings share voice, video, and data services. The backbone portion of this system was recently upgraded to 1 Gbits from 155 Mbits. In addition, the University operates satellite dishes for program downlinking and teleconferencing and a campus television network with 58 channels, eight of which are programmed exclusively by the University.

Cablevision Head End is a facility on campus providing a high-speed networking hub for Cablevision in Connecticut. Through this resource, voice, video, and telecommunications are made available to Cablevision's residential and commercial customers. This facility has the potential of providing the University with access to Cablevision's entire customer base with national outreach potential. Cablevision Head End reaches a broad audience inclusive of local schools, private homes, work places, and community centers.

The academic and administrative staff at Fairfield possesses extensive expertise in working with the local community, as witnessed by the multitude of community outreach projects that complement current programs. These efforts, which now reach nearly 3000 parents, students, teachers, business and engineering students and professionals, can be greatly enhanced, reaching broader audiences through the development of a comprehensive distance learning curriculum. What is required to take this step is modest when compared to what can be accomplished in a very short time. The establishment of the ITC will provide the central location for all departments and disciplines to meet to develop curricula for transmission via television or computer to classrooms, workplaces, community centers, or homes. It will also provide easy access to digital library resources for the students and the business community regionally and potentially statewide.

To accomplish these goals and establish the ITC, Fairfield University plans to upgrade, expand, and renovate a large portion of its new $20.4 million library structure. The University has already invested about $2 million of this total in the ITC component of the Library which will be dedicated to utilizing the telecommunications infrastructure and providing digital library resources to improve community outreach efforts from all of the various departments of the University.

The total of $5.5 million in federal partnership assistance requested by the University will be used to fund the Information Technology Center which will be used by University faculty and staff for internal instruction, and which will be available to residents of the surrounding communities through various partnerships designed collaboratively to meet the emerging needs of the community.

Fairfield University has comprehensive career preparation resources that can be utilized and shared with the community. These include:

—The School of Continuing Education
—The Graduate School of Education and Allied Professions
—The School of Engineering (undergraduate and graduate programs)
—The School of Business (undergraduate and graduate programs)
—The School of Nursing (undergraduate and graduate programs)
—The College of Arts and Sciences

Fairfield University's telecommunications capability is one of the best in the country. The construction of the ITC will help to coordinate and expand existing outreach as well as provide the foundation for new collaborations. Using expanded technology resources, faculty will be able to design and develop new curricula. The current technology resources at Fairfield, combined with the existing expertise of faculty and administrators, represent a strong foundation upon which the ITC will build and flourish.

In summary, the specific programmatic components of this Center will include information technology and computer training as well as a Global Information Resource Center for the region's corporations. Fairfield University is seeking a continuation federal partnership grant of $2 million from HUD to assist in the establishment of the Information Technology Center at Fairfield University to foster the essential dialogue required to ensure that the University's curriculum is aligned with the ever-changing technology training needs of society and the workplace. This funding, along with the $1.5 million provided by the Subcommittee last year, will allow the University to construct the shell of the facility and bring the ITC very close to becoming a reality.

We believe a Federal partnership demonstration at Fairfield University has the potential to meet the needs of Connecticut's schools as well as the economic development needs of businesses and the broader community throughout the State. We appreciate the Subcommittee's attention and consideration of our proposal for such a continued partnership opportunity.

Thank you.

PREPARED STATEMENT OF THE U.S. CONFERENCE OF MAYORS

Mr. Chairman and Members of the Subcommittee, we appreciate the opportunity to present our views on fiscal year 2001 appropriations for the Department of Housing and Urban Development, and in particular, the two priority programs for local governments Community Development Block Grants (CDBG) and the Home Investment Partnerships program (HOME).

We thank you, Mr. Chairman and Members of the Subcommittee for your continuing support for these priority local government programs. We are especially pleased by the $50 million increase in CDBG in fiscal year 2000 to $4.8 billion, and maintaining HOME funding at $1.6 billion.

As we stated in our testimony last year before this Subcommittee, local officials continue to be concerned about setting aside funds out of CDBG to fund "boutique", or one-time programs. We particularly oppose set-asides that are unrelated to the core purpose of CDBG. Despite increases in the appropriations for the program in recent years, the fact is over the past five years actual formula amounts to urban counties and central cities have been cut as a result of set-asides and an increase in the number of entitlement communities. Between fiscal year 1995 and fiscal year 2000, CDBG set-asides rose from $95 million to $560 million, more than 10 percent of the total appropriation.

Mr. Chairman, local government officials urge you to increase CDBG formula grants to entitlement jurisdictions by increasing the overall appropriation for CDBG in fiscal year 2001 to at least $5 billion and by scaling back funds set-aside under CDBG for special purpose grants.

WHY CDBG IS EFFECTIVE AND CRITICALLY NEEDED

Celebrating its 26th year, having been signed into law by President Gerald Ford in 1974, CDBG is the Federal government's most successful domestic program. The CDBG program's success stems from its utility, i.e., providing cities and counties with an annual, predictable level of funding which can be used with maximum flexibility to address their unique neighborhood revitalization needs. Based on HUD's most recent annual report to Congress, between fiscal year 1993 and fiscal year 1996 an estimated 14–17 million households benefitted from the CDBG program. During that same period an estimated 114,799 jobs was created through CDBG-funded economic development activities. In fiscal year 1993, entitlement communities spent funds in the following manner: housing rehabilitation, assisting over 200,000 households (35.8 percent), public works and infrastructure (22.7 percent), planning, monitoring and program administration (14 percent), public services (12 percent), acquisition and clearance of property (7.3 percent), preventing or eliminating slums and blight (6 percent), and economic development (6 percent).

IMPACT OF HOME

Like CDBG, the HOME program is producing very positive results in expanding the supply of affordable housing. Enacted as the centerpiece of the 1990 National Affordable Housing Act, the program became law with President Bush's signature.

Testimony of HOME's effectiveness can be found in the Committee Report accompanying the House version of the fiscal year 1999 appropriations bill where it praised the HOME program and gave it additional funding "because it can document results." The report said that "the program tracks the performance of its

grantees and measures their performance to determine whether the federal investment is worth while."

According to cumulative HUD data, since HOME was created in 1990, it has helped to develop or rehabilitate over 495,401 affordable homes for low- and very-low income families. Ninety percent of the HOME funds used for rental housing must be targeted to families with incomes at or below 60 percent of the area median. The balance may assist those with incomes up to 80 percent of the median income.

Targeting is very deep in the HOME program. The majority of HOME funds have been committed to housing that will be occupied by very low-income people and a substantial amount will assist families with incomes no greater than 30 percent of median. As of the end of February, 2000, more than 89 percent of home assisted rental housing was benefitting families at or below 50 percent of area median income. Sixty percent of all home-assisted rental housing (including tenant-based rental assistance) was helping families with incomes at or below 30 percent of area median income.

HOME funds help low- and very-low income families realize the dream of homeownership by providing for construction and rehabilitation of housing as well as providing the down payment and or closing cost assistance in the form of second mortgages necessary to bridge the gap. Since 1990, HOME funds have been committed to 277,334 homeowner units. All HOME funds used for homeownership must be targeted to households with incomes at or below 80 percent of area median.

HOME is cost effective and provides the gap financing necessary to attract private loans and investments to projects. For each HOME dollar, $2.37 of private and other funds has been leveraged since the program's inception. This clearly illustrates the effective and judicious use of HOME funds by participating jurisdictions.

Local officials urge you to fund the HOME program in fiscal year 2001 at a level of $2 billion.

RENEWAL OF EXPIRING SECTION 8 RENT SUBSIDY CONTRACTS

Mr. Chairman, we commend the Subcommittee and the Congress for fully funding all expiring tenant-based and project-based rent subsidy contracts last year. We urge you to do the same this year at an estimated cost of $13 billion. We note, too, that the Administration has asked for 120,000 new incremental housing vouchers, a proposal we support. Despite the booming economy the need for affordable housing continues to grow as housing prices increase faster than wages for low-income Americans. In addition, and in the absence of specific authorizing legislation, we urge that you include within the appropriations bill both the authority for, and the funding to, renew from the Section 8 fund all expiring rent subsidy contracts under the Shelter Plus Care program. This will make available approximately $37 million in fiscal year 2001 in HUD's "Continuum of Care" NOFA for communities to fund additional homelessness projects.

HOMELESS HOUSING FUNDING

Mr. Chairman, we support the Administration's funding request of $1.2 billion for homeless housing programs. We have been working with the authorizing committees to craft legislation converting the McKinney Act's homeless housing programs into a pure, formula-driven block grant program. In order for such a program to give sufficient funds to communities to carry out meaningful projects at the local level, it needs an appropriation of at least $1.2 billion. In addition, we support the shifting of the Shelter Plus Care contract renewals into the Section 8 fund, as mentioned previously.

LEAD-BASED PAINT

Finally, Mr. Chairman, we would like to briefly mention HUD's Lead-Based Paint final regulation. First, let us say, we support addressing/abating lead hazards in government supported housing programs. This rule which takes effect on September 15, 2000 requires all housing units assisted by CDBG and HOME to be assessed for lead-based paint hazards. This is a concern for local governments in addition to the lack of additional funds available to implement the rule. Because of this new regulation, local governments will be forced to spend more of their CDBG and HOME funds in meeting the requirements of this rule, which will include hiring certified contractors to conduct the activities of the rule, providing relocation costs to families in instances where they will have to temporarily relocate from their homes, and abating the lead hazards. Because of these requirements, local governments are concerned that their rehabilitation and homeownership programs assisted with

CDBG and HOME will be severely curtailed, with some smaller programs possibly being eliminated altogether because of the cost and severity of the rule.

Another major issue is the lack of, or the availability of trained contractors and laboratories to conduct the inspections, abatement, clearance, and testing of the lead-based paint. This will slow down programs affected by the rule and make spending of the CDBG and HOME funds a slower process. In addition, some programs need to be exempted altogether from the rule, such as volunteer programs like Christmas in April, and other minor repair programs (programs that provide less than $5,000 in repairs).

We ask that additional funding be provided to local governments to meet the requirements of this rule. We support HUD's recommended funding level of $120 million for the Lead-Hazard Control Grant Program in fiscal year 2001. However, based on the comments and concerns we have received from local governments, a re-examination of this program and the final rule, with some recommended program changes is in order.

CONCLUSION

Mr. Chairman, local government officials believe that a strong Federal role in housing and community development programs must continue. Since the Housing Act of 1937, Congress has enunciated, and repeated in subsequent housing acts, that, as a matter of national policy, the Federal government has an obligation to assist states and local governments in providing decent, safe and sanitary housing for lower income households. Perhaps, Congress said it best in a "Declaration of National Housing Policy" included in Section 2 of the Housing Act of 1949:

"The Congress hereby declares that the general welfare and security of the nation, and the health and living standards of its people, require housing production and related community development sufficient to remedy the serious housing shortage, the elimination of substandard and other inadequate housing through the clearance of slums and blighted areas, and the realization as soon as feasible, of the goal of a decent home and suitable living environment for every American family."

We submit to you that, while progress has been made toward this goal, it has not been fully achieved. The Federal government must continue its commitment to this National Housing Policy, backed by the necessary resources with which to continue the battle against neighborhood deterioration and a decaying housing stock.

Mr. Chairman, we look forward to working with you and the Subcommittee in adequately funding HUD's Housing and Community Development Programs for fiscal year 2001.

Thank you.

PREPARED STATEMENT OF THE ARC OF THE UNITED STATES

INTRODUCTION

The Arc of the United States is the largest voluntary organization in the country devoted solely to the welfare of the more than seven million people with mental retardation and their families. There are approximately 1,000 state and local chapters of The Arc across the nation. For 50 years, The Arc has had the goal of ensuring that community-based services and supports, including an appropriate variety of housing options, are available to people with mental retardation. The Arc also seeks the deinstitutionalization of people with mental retardation residing in large, inappropriate, and extremely expensive institutions—places that many people have been forced to call home, often because there is no where to live, or no services and supports in the community. The Arc is extremely appreciative of the support this subcommittee has provided over the past several years. In all of Congress, it was the members of this subcommittee that first recognized that people with mental retardation and other disabilities face a real housing crisis and that their needs cannot be ignored.

BACKGROUND

The Arc's concern about the need for a range of housing options in the community is reflected in our national "A Key of Our Own—Unlock the Waiting List" campaign. This campaign was undertaken because people with mental retardation and their families face a crisis in relation to housing and other community-based supports and services. Nation-wide data indicate that, in 1997, at least 271,000 people with mental retardation were on waiting lists for community-based support and services, including housing. Some states, like California and Ohio have not kept statewide

records and most experts agree that current numbers are an underestimate of need. The Arc of Ohio currently is compiling state-wide data that will be available at the end of this month. It is important to remember that many waiting list initiatives started out looking only at the need for funds for supports and services for people and not at the availability of affordable housing—this is beginning to change.

Approximately 48 percent (325,650) of people with mental retardation and developmental disabilities, who receive a variety of support services, live at home with their families.[1] Currently, adults with mental retardation wait at home with aging parents. These are the parents who decided 30–40–50 years ago to resist the pressure to institutionalize their children and instead kept them at home with their families. These are the families that, in doing so, saved the state and federal governments, hundreds of thousands of dollars. The average cost of institutional care is more than six times the average cost of community-based care—$94,348 for institutional care v. $14,902 for community-based care.[2] These are the parents that fought for their children's right for a public education and a life in the community. 1998, in Maryland there were over 1,100 people waiting for residential services and over 60 percent of them lived with a caregiver 60 or older and—of those—13 percent lived with a caregiver over 80. Over the past two years, one-half of these people got access to housing services because of the statewide waiting list initiative. The ranks of these elderly parents are growing each day and they will be followed by those younger families who now expect—as they should—that their children with disabilities have every right to live, learn, work and play in the community. In addition, too many adults with mental retardation still wait in large inappropriate institutions and more and more people with mental retardation are being found among the homeless.

Some people with mental retardation and their families have been waiting for housing for years. The adult son of one family in Oregon was on a waiting list for residential services for 16 years. The father of one young woman in New Jersey died before he could see an answer to his major prayer—a place of her own in the community for his daughter.

Recently, HUD published its latest report on worst-case housing needs.[3] Once again, HUD's report pays little attention to the housing crisis facing non-elderly people with disabilities. The report states there are now 5.4 million households or 12.3 million people with worst-case needs. It indicates that worst-case needs of the elderly and non-elderly individuals with disabilities grew at 8 percent each since the last report and the needs of families with children grew by 6 percent. Yet, the report also admits that its data do not capture the real needs of people with disabilities. The report argue the current worst case numbers validate HUD's request for 120,000 new vouchers and that "rental assistance is a critical and flexible tool that provides access to decent and affordable housing for low-income families of all backgrounds, including the elderly, working families with children, and minority households". The Arc believes all these groups need assistance but so too do people with disabilities, who are much less likely to be working and much more likely to be living in extreme poverty. Thank goodness for the foresight of this subcommittee.

In 1998, Supplemental Security Income (SSI)—the primary source of income for over 4 million people with disabilities—was $494 per month ($5,928 per year)—only 24 percent of median income nationally and less than 20 percent of median in eight states and the District of Columbia. Priced Out in 19984, showed there is not a single housing market in the country where a person with a disability, receiving only federal SSI benefits, can afford to rent a modest efficiency apartment for 30 percent of their income or less. Using HUD housing market areas and Fair Market Rents as the standard, Priced Out documented that the national average cost of a one-bedroom apartment is 69 percent of monthly SSI income. This puts people with disabilities who receive SSI well in the range of worst-case needs. They have incomes below 50 percent of their local median; would have to pay more than one-half of their income for rent and utilities; or live in seriously substandard housing.

These are very real and sobering statistics. Clearly, the four million plus people with disabilities who receive SSI, as well as thousands of other people with mental retardation and other disabilities, who work at very low paying jobs, are too poor to find decent, safe and affordable housing unless they have some assistance from

[1] National Conference of State Legislatures, Deinstitutionalization of Persons with Developmental Disabilities: a Technical Assistance Report for Legislators, (2000).

[2] Institute on Disability and Human Development, University of Illinois, (1998).

[3] U.S. Department of Housing and Urban Development, Rental Housing Assistance-the Worsening Crisis, (2000). Technical Assistance Collaborative & Consortium for Citizens with Disabilities Housing Task Force, Priced Out in 1998: the Housing Crisis for People with Disabilities, (1999).

the federal government. These people are not benefiting from the current economic boom. In fact, they and other very poor people are facing even more problems as less and less of the existing housing remains affordable to them.

Last year this Congress passed the Ticket to Work and Work Incentives Act and, a bill that was designed to remove some of the disincentives people with disabilities face when they get a job—like the loss of health care coverage through Medicaid or Medicare. The current reality is that, even with a chance to make more money, most people with disabilities remain among the very poor and remain in need of some housing assistance if they are ever going to be able to live a stable and productive life in the community.

Last year the U.S. Supreme Court issued the landmark Olmstead decision. This decision requires states provide services and supports to people with disabilities in the least restrictive setting appropriate. It should lead to a number of very important things. First, states will become less reliant on large, expensive, segregated institutions. Second, communities will be where people with disabilities find needed supports and services. Obviously, more affordable housing for people with disabilities is a critical part of this picture and will help states and communities implement the Olmstead decision.

There are many reasons why people with mental retardation face a housing crisis. These include:

—*The lack of a comprehensive federal housing policy for people with disabilities ranging from rental assistance to homeownership.*—HUD—charged with addressing the housing needs of people with low incomes—has little idea of the range of housing needs of people with mental retardation and other disabilities. For years, The Arc and others have tried to educate HUD that all its programs should apply to people with disabilities. HUD promotes homeownership, community empowerment, the need for more tenant-based rental assistance, and fair housing enforcement—rarely mentioning the needs of people with disabilities. Without the support of Congress, people with disabilities would have little access to Section 8 tenant-based rental assistance and non-profit disability groups, like The Arc of the Northern Chesapeake, would not have access to Section 811 "Mainstream" tenant-based rental assistance.

—*The lack of affordable housing and tenant-based rental assistance and the continued under-funding of the Section 811 program.*—The Section 811 program has had little if any support from the Administration in the past. Cuts to the Section 811 program during this Administration have seen its funding fall from $387 million only a few years ago to its current level of $201 million. The only reason that the program received $201 million in fiscal year 2000 was due to the actions of Congress. While the dollars for this program have gone down, HUD's expectations for it have gone up—without the corresponding request for an increase in funds. Amazingly, this year, HUD with its new emphasis on housing "production" is only recommending a $9 million increase for Section 811 and is, once again, recommending that one-half of the Section 811 funds go to rental assistance—cutting its effectiveness as a housing "production" program in half.

—*Continued widespread discrimination and "Not In My Backyard"—"NIMBY" policies.*—In communities around the nation, people with mental retardation have benefited from the protections of the 1988 Fair Housing Amendments Act (FHAA). Prior to the FHAA, the doors to many communities were closed. Now, those doors have been opened and, in the majority of areas, people with mental retardation live in harmony with their neighbors. Unfortunately, discrimination will not die and NIMBY lives. People with mental retardation need strong enforcement of fair housing laws to help them fight discrimination and find a broader range of housing options in the community.

The Arc believes that people with mental retardation and other disabilities are entitled to a fair share of federal housing resources. Many people in our nation are experiencing the benefits of a burgeoning economy. However, for many others—including people with disabilities with low incomes—the robust economy makes things worse as housing costs rise. The Arc makes the following recommendations for fiscal year 2000.

RECOMMENDATIONS

Section 8 tenant-based rental assistance

The Arc believes that Section 8 tenant-based rental assistance is an effective too[for helping people with mental retardation live integrated lives in their home communities. Many people with mental retardation are dependent on SSI benefits or have very low paying jobs. They are unable to afford a decent place to live unless

they have a rent subsidy. Medicaid is a source of service funding for people with mental retardation. But, while Medicaid can help people get the services and supports they need, people still need a rental subsidy to allow them to be able to afford a place to live. HUD's fiscal year 2001 budget includes a first time request for $25 million for 5,000 vouchers set-aside for non-elderly disabled tenants living in public housing projects that convert to elderly-only projects. The non-elderly disabled tenants are given vouchers so they can find housing elsewhere.[4] This request shows that HUD continues to underestimate the needs of people with disabilities and does not understand that the existing Section 8 program for people with disabilities, which currently targets $40 million to off-set the loss of units in public and assisted housing, prohibits the use of these vouchers as an incentive to move people out of their current homes.

—The Arc seeks your support for $50 million for Section 8 tenant-based rental assistance specifically for people with disabilities. The Arc realizes that problems have hindered the distribution of these funds, including the lack of interest by PHAs in applying for these funds (10 percent) or the inability of PHAs to help people with disabilities find suitable housing. While a few PHAs have partnered with non-profit disability groups, such as their local chapter of The Arc, and used the funds well, many more are sitting on "disability vouchers," not coordinating their efforts with disability organizations, and not helping people with disabilities find housing.

—The Arc urges you—following in the footsteps of the action you took last year to open up eligibility for the Section 811 "Mainstream" vouchers to non-profit disability organizations—to make these Section 8 funds available to non-profit disability organizations.

Section 811 supportive housing for persons with disabilities

The Arc has major concerns with HUD's fiscal year 2001 appropriations recommendations for the Section 811 program. Section 811 plays an important role in producing new housing, while assuring a level of individualized supports required by man individuals with severe disabilities. The Arc has worked to shape the Section 811 program so it can help provide small, scattered-site housing in the community for people with disabilities. The Arc has many chapters who have acquired or developed housing through the Section 811 program.

Last year seven chapters also applied to administer Section 811 "Mainstream" rental assistance. A number of these chapters are in states represented on this Subcommittee (see chart below). However, only one was funded—The Arc of the Northern Chesapeake.) Right now chapters across the country are trying to decipher the Super NOFA and preparing to apply for both traditional and "mainstream" Section 811 funds. These chapters will once again get technical assistance through the Technical Assistance Collaborative and the CCD Housing Task Force and not through HUD.

—This year HUD has recommended an appropriation of $210 million for the Section 811 program. While this proposal represents a $9 million increase, it also is another obvious example that HUD does not understand the housing crisis faced by people with mental retardation and other disabilities. Fortunately, Congress has ignored HUD's Section 811 recommendations for the past several years and has increased funding for the program. The Arc urges you to do so again and recommends an increase to $300 million.

—HUD is once again—over the continued objections of this Subcommittee and The Arc and other advocates—proposing to target 50 percent of Section 811 funds to tenant-based rental assistance. The Arc urges you to reject this proposal. For many years, the Section 811 program has been a shining example of a public-private partnership that works. It has played a critical role in "housing production"—one of HUD's "new" goals. It has added to the stock of affordable and accessible housing and has been proven to be one of HUD's most effective programs, successfully investing federal funding through non-profit disability organizations.

—The Arc urges you to go one step further than last year and make non-profit disability organizations the only eligible applicants for Section 811 "Mainstream" tenant-based rental assistance. Last year approximately 100 non-profit disability groups applied to administer these funds and only 14 were funded, including The Arc of the Northern Chesapeake. The Executive Director of The Arc of the Northern Chesapeake is here today to talk about how the 75 vouch-

[4] U.S. Department of Housing and Urban Development, HUD Budget: fiscal year 2001, HUD: Back in Business (p. 31).

ers they received will help change the lives of people with mental retardation and other disabilities.

—The Arc urges the Subcommittee to target at least one-percent of any increase for the Section 811 program (or $1 million whichever is greater) to provide technical assistance to non-profit disability organizations.

State	Name	No. applied for	No. received	Amount received	TAC TA?
AL	The ARC of Fayette & Lamar Counties	75			Yes.
FL	The ARC of Putnam County, Inc	75			Yes.
IN	Passages (Arc)	75			Yes.
MA	North Shore ARC	75			No.
LA	ARC of Iberia	10			Yes.
MD	ARC of Northern Chesapeake Region	75	75	$2,495,496	Yes.
NC	ARC or North Carolina, Inc	75			No.

HOME, CDBG AND THE CONSOLIDATED PLAN

The Arc seeks your support for requirements to ensure that funds from the HOME and CDBG programs are targeted to people with mental retardation and other disabilities. These two programs currently do little to add to the range of housing options for people with disabilities in the community. In light of the dwindling options and the growing need of people with disabilities, both of these locally driven programs should be required to help provide housing for those with the greatest need.

—We urge the Subcommittee to direct HUD to provide information to all jurisdictions that people with disabilities and their advocates must be at the table when the ConPlan is developed. In addition, HUD should be directed to evaluate ConPlans for this inclusion, as well as to determine if the needs reflected in the final plan match the proposed uses of federal funds.

FAIR HOUSING

The Arc continues to be concerned with the discrimination faced by people with mental retardation in the community; with the building industry's ongoing attacks on the Fair Housing Accessibility Guidelines; and with HUD's lack of focus on fair housing rights for people with disabilities. Federal fair housing protections have opened doors in communities in numerous ways. According to the law, communities can no longer say "we don't want your kind" and developers can no longer ignore the accessibility needs of people with disabilities. Unfortunately, as stated earlier, discrimination refuses to die and communities and developers still keep up their efforts. The Arc seeks your support in sending the message to HUD that protecting the fair housing rights of people with mental retardation and other disabilities is an important part of its job.

—The Arc urges the Subcommittee to require HUD to inform all those who receive federal funds (CDBG, HOME, LIHTC, etc.) of the need for compliance with the Fair Housing Act Accessibility Guidelines.

—We also urge the Subcommittee to require HUD—when reviewing Consolidated Plans for the award of federal funds, to take into consideration a community's adoption of a building code that is compliant with FHAAG and a community's efforts to remove "impediments" to fair housing.

—The Arc also recommends HUD and the Treasury Department be required to work cooperatively to ensure that tax credits are used to build housing for those with very-low incomes; that is physically accessible; and that housing providers are willing to make reasonable accommodations to meet the needs of people with mental and/or physical disabilities.

SUMMARY

Thank you for the opportunity to provide this testimony. The Arc appreciates your understanding and support in the past and would appreciate your continued support in the future. The Arc has attempted to work in collaboration with HUD with little success. The Arc strongly believes that the actions of this Subcommittee have improved the lives of thousands of people with disabilities. We wish HUD would place the same priority on their needs as you have. For more information, please contact: Kathleen McGinley, The Arc Governmental Affairs Office, 202–785–3388, McGinley@thearc.org

PREPARED STATEMENT OF THE CONSORTIUM FOR CITIZENS WITH DISABILITIES HOUSING TASK FORCE

INTRODUCTION

Mr. Chairman and Committee Members, the Consortium for Citizens with Disabilities (CCD) Housing Task Force is grateful for the opportunity to provide testimony to the Subcommittee on the housing needs of people with disabilities and the problems they encounter within the nation's affordable housing system. We would like to take this opportunity to (1) thank this Subcommittee's strong leadership in helping to address the housing needs of people with disabilities; (2) provide an update on the acute housing crisis facing people with disabilities; (3) document the failure of HUD and the nation's Housing Authority system to address this situation; and (4) offer recommendations for Congressional action.

The Consortium for Citizens with Disabilities (CCD) is a Washington based coalition of approximately 100 consumer, advocacy, provider and professional organizations who advocate with and on behalf of people of all ages with disabilities and their families. The CCD Housing Task Force focuses specifically on housing issues that affect people with disabilities, particularly the availability of affordable and accessible community based housing options and the protection of their fair housing rights. The individuals whom we represent—most of whom have very low incomes and many of whom depend solely on Supplemental Security Income (SSI) or other disability benefits—may be current participants of HUD assisted and public housing programs, may be on federal housing program waiting lists, or may need to apply for federal housing assistance.

During the past year, the housing crisis confronting people with disabilities continued unabated. Rental housing costs continue to rise, making it more difficult than ever for people with disabilities to afford housing without government assistance. During 1999, the United States Supreme Court's Olmstead decision affirmed the rights of people with disabilities to live in communities of their choice rather than in restrictive institutional settings—yet there is no affordable housing available for people with disabilities in most communities across the country. Today, it is also abundantly clear that the nation's affordable housing system—meaning HUD, PHAs, and state/local government housing officials—have not made the housing needs of people with disabilities a priority. Once again, the CCD Housing Task Force is looking to the members of this Subcommittee to ensure that the housing needs of people with disabilities are addressed within our nation's federal housing policies.

BACKGROUND: THE SEARCH FOR HOUSING FOR MATTHEW BAUSCH

Since the 1980s, the disability community has made it clear that people with disabilities want and need affordable homes in the community. However, the key players in the affordable housing system—particularly HUD, the nation's Public Housing Authorities, owners of HUD assisted housing, and state and local government housing officials—have still not recognized or prioritized the housing needs of people with disabilities. As a result, people with disabilities receive a disproportionately small share of federal housing funding and have serious problems "navigating" through the housing system, as will be illustrated by Matthew Bausch's recent experience.

The designation of elderly only housing means that more and more people with disabilities like Matthew Bausch are still being literally shut out of the subsidized housing market. Two years ago, the House HUD–VA Subcommittee directed HUD (in the fiscal year 1999 appropriations report) to complete an inventory of HUD assisted housing that had been designated "elderly only" so that (1) people with disabilities would know where they were and were not eligible to apply; and (2) the full impact of "elderly only" housing policies on people with disabilities could be properly assessed. Two years later, this inventory has yet to be done!

Matthew Bausch—whose income is limited to disability benefits of approximately $600 per month—recently moved to Southern Florida from Connecticut in order to take advantage of spinal cord injury rehabilitation services. Because HUD had not done an inventory of elderly only housing, Matthew Bausch and his family had to contact 30 HUD assisted housing providers on their own in order to learn whether Matthew was eligible to live in a subsidized accessible unit in any of these properties. Despite the fact that the Bausch family had no knowledge of HUD's assistance housing programs, the family made a great effort and contacted all thirty properties. Every property said no to Matthew—he was not elderly, so he was not eligible. The Bausch family had no way to determine whether Matthew was being dis-

criminated against on the basis of his disability, or whether the housing provider was, in fact, complying with federal law and regulations.

Fortunately, Congress had taken steps to ensure that there would be some Section 8 rent subsidies available for people like Matthew. Through the TAC/CCD Housing Task Opening Doors publication, the Bausch's learned that one PHA in the area had Section 8 Mainstream vouchers appropriated by the Congress to off-set the loss of housing converted to "elderly only". Matthew applied and was given a Section 8 voucher within a few months.

Unfortunately, Matthew's problems didn't end when he received the Section 8 voucher. The PHA did not understand fair housing laws and was reluctant to grant a "reasonable accommodation" so that voucher could be used in a higher cost unit that was fully accessible. Matthew also needed help to find an accessible unit and help convincing a property manager that Low Income Housing Tax Credit properties were required by federal policies to accept Matthew's Section 8 voucher. [NOTE: The property manager claimed to have no knowledge of this requirement, and was preparing to reject Matthew's application because he had a Section 8!] Thanks to the work of Congress and 6 months of technical assistance from the CCD Housing Task Force and TAC, Matthew finally moved into an accessible apartment he could afford.

If Matthew and his family were here today (they did testify before the House HUD–VA Subcommittee), he would personally thank you for your work on behalf of people with disabilities and urge your continued support for new Section 8 vouchers for people like him. However, he would also tell you that the HUD and the PHA system did not work for him and is not working for thousands of other people like him. What happened to him is a perfect illustration of what happens when HUD does not do its job and a good example of why this Subcommittee should direct more federal housing funding to the non-profit disability organizations who are ready and willing to help people with disabilities obtain decent, safe, affordable and accessible housing in communities of their choice across the country.

HUD ACCOUNTABILITY RECOMMENDATION

The CCD Housing Task Force urges this Subcommittee to hold HUD accountable for its failure to conduct, maintain, and post on HUD's web site a complete inventory of HUD public and assisted housing projects and their occupancy policies. This information should include housing with a specific percentage of units set-aside for people with disabilities; and whether the housing is (1) elderly-only housing; (2) disabled-only housing; (3) mixed housing equally available to both elderly households and people with disabilities under age 62.

UPDATE ON HOUSING NEEDS OF PEOPLE WITH DISABILITIES

One year ago, the CCD Housing Task Force and TAC published Priced Out in 1998:The Housing Crisis of People with Disabilities. This report documented that there was not one county or metropolitan area in the United States where a person receiving Supplemental Security Income (SSI) benefits could actually follow federal guidelines for housing affordability and pay only 30 percent of their monthly income for rent. Instead-as a national average-a person with a disability must spend 69 percent of his or her SSI monthly income to rent a modest one-bedroom apartment priced at HUD Fair Market Rent (FMR).

Priced Out still stands as the most accurate assessment of the housing needs of people with disabilities. Two weeks ago, HUD issued its latest worst case housing needs report entitled Rental Housing Assistance—The Worsening Crisis—a report that HUD readily admits undercounts people with disabilities. Given the lack of accurate HUD data, the CCD Housing Task Force and TAC are working to update the information, in Priced Out for the states represented by the members of this Subcommittee. The information is startling because it shows people with disabilities continuing to lose ground in the housing market as very small increases in federal SSI benefits do not keep pace with rapidly escalating costs.

"WORST CASE" RECOMMENDATION

The CCD Housing Task Force urges the Subcommittee to require HUD to develop an accurate assessment of the "worst case" housing needs of people with disabilities. Such an assessment is essential if people with disabilities are to receive their "fair share" of housing assistance made available from the federal government.

HUD BUDGET DOES NOT ADDRESS THE HOUSING NEEDS OF PEOPLE WITH DISABILITIES

As people with disabilities are increasingly "priced out" of the rental housing market, and as federally subsidized housing for people with disabilities continues to disappear due to "elderly only" housing policies, one must ask the simple question: "Where will low income people with disabilities live?" As a result of the leadership of this Subcommittee, over $170 million in new Section 8 rent subsidies—approximately 30,000 overall—have been appropriated for people with disabilities since 1997, including $40 million this past year. This year, HUD's budget proposal continues to be unsatisfactory—requesting only $25 million in new Section 8 funding, apparently to assist Housing Authorities to implement "elderly only" housing policies and relocate people with disabilities to alternative housing. Clearly this is an inappropriate use of these funds and much more funding is needed to help people like Matthew Bausch who are no longer able to live in HUD public and assisted housing developments and who cannot afford market rents.

SECTION 8 RECOMMENDATIONS

The CCD Housing Task Force urges the Subcommittee to appropriate $50 million to support 9,000 new Section 8 tenant based rental assistance funding for people with disabilities. While a host of problems have hindered the effective distribution of these subsidies by HUD and PHAs, all of the funds have been allocated and the need is still critical. Each year, more PHAs are designating "elderly only" public housing, and more than 58 percent of HUD assisted housing providers have implemented "elderly only" designation policies, according to a General Accounting Office study. We recommend that PHAs requesting the designation of "elderly only" public housing be required to set-aside 33 percent of their Section 8 turnover for people with disabilities.

We also urge the Committee to expand eligibility for the administration of Section 8 vouchers targeted to people with disabilities to non-profit organizations with the interest and experience administering housing programs for people with disabilities.

HUD proposes only $210 million for the Section 811 Supportive Housing for Person with Disabilities program—a small increase of $9 million over fiscal year 2000. HUD also continues to propose that 50 percent of the Section 811 appropriation be used to create new vouchers for people with disabilities. The CCD Housing Task Force strongly opposes this proposal because it ignores the original intent of the Section 811 program, as well as diminishes the important role the program has played in producing affordable and accessible housing in the community. it is vitally important that the Section 811 appropriation be increased. This year, only $109 million was made available for new housing production activities, $48.5 was utilized for tenant based rental assistance, and $43 million for new and renewing Project Rental Assistance Contracts. In addition, the current cost-limits for the Section 811 program should be increased because they do not reflect the actual cost of developing housing in today's market. Tenant-based assistance is one part of the equation. It is not the answer for all people with disabilities, especially those with severe disabilities who need intensive services and supports. Given the future need for permanent community based supportive housing that will result from the Supreme Court's Olmstead decision, the production of new and accessible housing for people with the most severe disabilities must be a high priority.

SECTION 811 RECOMMENDATIONS

CCD recommends increasing the funding for the Section 811 Program to $300 million and to appropriate no more than 25 percent of this funding for tenant based rental assistance. Housing production goals for people with disabilities must be increased. Given the housing crisis facing people with disabilities, the Section 811 program needs to be restored to the $387 million funding level of five years ago. A $300 million appropriation for fiscal year 2001 will send a strong message about the future of the Section 811 program, and encourage more non-profits to apply.

We also urge the Subcommittee to direct HUD to exercise its waiver authority and permit only non-profit disability organizations—and not PHAs—to apply for the Mainstream tenant-based rental subsidies available through the Section 811 program. Given the poor track record of PHAs in administering Section 8s for people with disabilities, the CCD Housing Task Force believes that Section 811 tenant based rental assistance funds should be provided only to non-profit disability organizations, and that HUD refrain from converting Section 811 funding to Section 8.

Finally we urge the Subcommittee to appropriate at least one-percent of this increased funding (or $1 million whichever is greater) to fund a technical assistance

program for non-profit disability organizations administering the Section 811 tenant based assistance program.

CDBG AND HOME

The CCD is concerned that HUD overlooks its mainstream housing resources in addressing the housing needs of people with disabilities. HUD cannot document the number of people with disabilities nor federal funds associated with these two programs that have been used to expand housing opportunities for people with disabilities. HUD should use these two programs as well as others to require state and local jurisdictions to allocate adequate resources to people with disabilities.

HOME AND CDBG RECOMMENDATIONS

The CCD recommends HUD be required to provide CDBG and HOME technical assistance on affordable housing targeted specifically to people with disabilities and their advocates.

We also recommend HUD be required to report to Congress the number of people with disabilities who benefit from HOME and CDGB; the amount of federal and state funding involved; and community initiatives undertaken to alleviate the housing crisis for people with disabilities.

FAIR HOUSING

Federal fair housing protections are provided for people with disabilities basically the Fair Housing Amendments Act, Section 504 of the Rehabilitation Act, and the Americans with Disabilities Act. These important protections have opened doors in communities in numerous ways. Communities can no longer say "we don't want your kind" and developers can no longer ignore the accessibility needs of people with disabilities. Unfortunately, as stated earlier, discrimination refuses to die. Therefore we urge this Subcommittee to send a clear message to HUD about the importance of civil rights protections for people with disabilities.

FAIR HOUSING RECOMMENDATIONS

The CCD recommends HUD be required to inform all those who receive federal funds (CDBG, HOME, LIHTC, etc.) of the need for compliance with the Fair Housing Act Accessibility Guidelines and that any HUD funds targeted to "technical assistance" be made equally available to disability organizations and the building industry.

The CCD recommends that, in reviewing Consolidated Plans for the award of federal funds, HUD be required to take into consideration a community's adoption of a building code that is compliant with FHAAG and a community's efforts to remove "impediments" to fair housing.

The CCD recommends HUD and the Treasury Department be required to work cooperatively to ensure that tax credits are used to build housing for those with very-low incomes; that is physically accessible; and that housing providers are willing to make reasonable accommodations to meet the needs of people with mental and/or physical disabilities.

We thank the Subcommittee members for all that you have done to improve the lives of people with disabilities.

PREPARED STATEMENT OF CENTRAL PIEDMONT COMMUNITY COLLEGE

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to submit testimony to the hearing record regarding Central Piedmont Community College's (CPCC) efforts to meet a regional and national need for forensics technician training. By way of background, CPCC is the largest institution of higher education in the State of North Carolina, with over 60,000 students, and is the leading provider of career training and re-training in the State. This testimony is concerned with the College's recent efforts to establish a National Academy for Forensic Computing and Investigation in response to requests from North Carolina's law enforcement community, including the Federal Bureau of Investigation, as well as the Charlotte-Mecklenberg business community.

CPCC was specifically targeted to carry out this mission by virtue of a thirty-year history as the leading provider for criminal justice training in a 14 county area of North Carolina. The public safety program at CPCC has expanded quickly with the growth of the Charlotte-Mecklenberg region into a major regional criminal justice training center offering a comprehensive range of programs and services, including instruction in the high demand occupational skills area of forensics technology. This

instruction is currently available to a variety of law enforcement and public agency officials who previously would have had to travel extensively for this type of current professional development and training.

Citing extreme inability to find skilled workers in the field, a consortium of local industry leaders, including the Charlotte Chamber of Commerce, the Federal Bureau of Investigation, and representatives from the banking, insurance, law enforcement, and legal industries, asked CPCC's Department of Health & Public Safety to develop a training program in forensic technology. These industries also seek assistance in retraining and upgrading skills of incumbent workers.

The challenge is to meet not only local public agency demand for criminal justice training, but also the increasing need from the private sector which is now requesting specialized skills training in criminal justice topics such as forensics technology. There are currently no forensic science degrees offered at the graduate or undergraduate levels at any of North Carolina's colleges and universities.

The need for forensics training can also be translated to the national level. According to the National Institute of Justice (1999), 49 percent of the cases prosecuted in the U.S. were successful solely because of the forensic sciences. Unfortunately, law enforcement, social services, and other governmental agencies, along with private corporations nationwide must search throughout the country to obtain forensic training. This translates into an investigative gap, particularly pronounced in the Southeast United States, costing reduced productivity, delayed justice, and loss of funds. Compounding this situation is the fact that the technology and science are changing so rapidly that ongoing training and skills upgrades are necessary.

The establishment of a National Academy for Forensic Computing and Investigation (NAFCI) at centrally located CPCC can help to bridge the investigative gap both regionally and nationally while providing high skill careers for North Carolina

CPCC's Public Safety facility at the North Campus is the home to the College's Criminal Justice Program. Today, the North Campus serves more than 12,000 citizens of the Charlotte-Mecklenberg region on an annual basis. In addition, the facility is the primary training site for ten local, two state, and three federal agencies, including the Federal Bureau of Investigation, the Secret Services, and Federal Probation.

There are currently three course areas under the umbrella term public safety at CPCC's North Campus—police, fire, and rescue. Associates' degrees are available in Criminal Justice and in Fire Protection Technology, and in-service training for all three groups is available. An additional component within the criminal justice arena is a Regional Training Center, headquartered at CPCC that is responsible, in a 14-county area, for providing in-service training for criminal justice professionals in North Carolina. CPCC is also the primary training source for all Firefighter I and II level personnel with the Charlotte Fire Department and all volunteer firefighters in Mecklenberg County. Given this breadth of experience, CPCC is the institution best positioned to take on the responsibility of addressing the need for forensic training.

The development and implementation of the NAFCI will serve to increase the skills of the current workforce reliant upon and adversely affected by a lack of appropriate training in forensic science. These groups include law enforcement officers, fire service, prosecutors and criminal attorneys, investigators, crime laboratory personnel, medical examiners and coroners, correctional personnel, insurance investigators, agents, and claims adjusters, fraud examiners, social services professionals, and nurses.

The Academy's emphasis on Computer Forensics will demonstrate the value of the application of computer technologies in solving the information needs of anyone required to conduct forensic investigations. Each of the following topics represents a computer class; others will be developed as required:

Facial Reconstruction of Unknown Human Remains	Digital Imaging.
Information Systems Security	Cyber Crime.
Identifying and Locating the Cyber Criminal	Voice Recognition.
Reconstruction of Damaged Computer Software	Fingerprint Identification.
Using the Computer to Determine Time of Crime	Firearms Identification.
Construction of new Evidence Tracking Systems	Dental Identification.
Computerized Collision Diagramming	DNA Data Retrieval.

The workforce development goals of this initiative are to train or retrain 2000 workers in the forensics field within the first 5 years. This timely response will result in a significant change in the way that CPCC accomplishes workforce development. Through the creation of an effective bridge between industry and academia, CPCC hopes to become a national model for community colleges across the country

not only in the field of forensic science but also in other fields where workforce gaps exist.

Given industry's need and the characteristics of the target audience, CPCC proposes innovative strategies for success. One of the most unique features of this initiative is that CPCC has bridged the gap between industry and academia by forming an Industry Advisory Panel charged with providing direct and substantial course input throughout the life of this initiative. The panel includes a diverse array of leading edge companies dependent upon forensics for the success of their business. Needs assessments will be conducted to determine skill areas that require further development, and special courses will be designed and implemented based on statements of need. NAFCI will then create intensive courses for faculty in the various fields as well as for current professionals in the various areas. For example, social services workers can be educated on the indicators of child abuse and correct use of the multidisciplinary approach to child abuse investigation. Courses in forensic computing, accounting, arson investigation, forensic accident reconstruction, and bodily injury can be offered to fraud investigators.

The NFTC seeks to develop curriculum strategies and educational materials that meet the needs of all the vast and varied types of life-long learners. Thus, in addition to the more standard educational materials, CPCC will develop and offer short-term training modules for the certificate seeker and on-line courses for the displaced or incumbent worker who is much better served by courseware unlimited by time or place. Opportunities for education in the field via service learning programs and/or internship experiences will also be utilized. NAFCI will also seek to provide state-of-the-art or "hands-on" training for the investigative professional along with continuing education approved by the appropriate certifying board of each state serviced.

NAFCI will increase the number of people who have the forensic skills to develop and support community-based investigations, especially in rural areas of the country. For example, the NAFCI will actively seek to train experienced Registered Nurses from rural areas to become forensic nurses by conducting advanced courses in forensic pathology, forensic dentistry, and forensic anthropology. These nurses may then assist rural law enforcement agencies with evidence collection from violent crimes. The Center will also promote public education concerning all disciplines in the forensic sciences, and serve as a major source for national certification by The American Board of Medicolegal Death Investigations.

Educational materials will be produced and widely disseminated via various means including, electronic media, CD–ROMS, conferences, journal articles, manuals, newsletters, on-line courses with interactive laboratory experiences, summer institutes, videos, and workshops

In addition, CPCC will liaison directly with the local high school populations via College Tech Prep, Upward Bound, and Talent Search programs to assist disadvantaged students prepare for forensics technology careers. Additional outreach to disadvantaged populations will take place via CPCC's collaborations with the local JOBSLINK (North Carolina's One-Stop Career Shop). JOBSLINK is a project sponsored by the State Employment Service Office, JTPA, the Department of Social Services, and Office of Vocational Rehabilitation. Although designed to meet the needs of everyone, JOBSLINK has specific responsibilities for working with welfare recipients and the unemployed. Because CPCC provides staffing to JOBSLINK, faculty will have the opportunity to intimately recruit students from the local disadvantaged population.

CPCC will draw upon its experience in training Charlotte and Mecklenberg County's information technology specialists, law enforcement, fire service, and allied health professionals as well as the skills of its own Investigators and a team of nationally recognized forensic practitioners to establish the NAFCI. It will be necessary, however, given the rapid advances made in technology-related fields, to pursue immediately an aggressive faculty preparation and enhancement initiative. Specifically, faculty will receive knowledge of state-of-the-art developments and techniques in the field; instruction in modern teaching practices (including new instructional technologies); opportunities to synthesize knowledge that cuts across disciplines (computer science/engineering technologies); and opportunities to interact with industry.

Conferences, workshops, electronic networks, and journal articles will constitute the preferred methods of dissemination for program deliverables. In addition, during training sessions, time will be set aside for information exchange among participants. A written summary of these information sessions will be available by request to qualified agencies. Training schedules and summaries of training points will be made available to members of the American Academy of Forensic Sciences. A lim-

ited number of "train-the-trainer" workshops are proposed for specific techniques and for instructors with appropriate credentials.

There are no colleges or universities in North Carolina that currently offer degrees in forensic sciences at the graduate or undergraduate levels. There are, however, courses offered in various institutions, including University of North Carolina -Charlotte. There is potential for developing a "pipeline" between CPCC and 4-year institutions that allow students to specialize in areas of science related to forensics so that those students will be prepared to enter into laboratory work, field work or graduate forensic programs.

In addition, the North Carolina State Bureau of Investigation maintains a full-service laboratory in Raleigh and a limited-service laboratory in Asheville, for the purpose of examining all types of evidence related to criminal investigations. The establishment of a National Academy for Forensic Computing and Investigation at CPCC could provide a training link to these two institutions.

CPCC is seeking a federal partnership to assist with the development of the National Academy for Forensic Computing and Investigation (NAFCI) and its programs. The goal of the program is to upgrade the skills of North Carolina's criminal justice professionals and create, through training, thousands of needed sustainable skilled careers for the State.

To accomplish this goals CPCC is seeking a total of $4 million in federal partnership assistance to establish the approximately $7.2 million Center, which will include a state-of-the-art forensics laboratory. A federal investment in this initiative is warranted for the contribution that the NAFCI can make toward filling an investigative gap that exists in the region, for the new careers that will be established, and for the necessary upgrading of skill levels for the better functioning of North Carolina's criminal justice system.

Thank you.

PREPARED STATEMENT OF ST. JOSEPH'S HOSPITAL HEALTH CENTER

Mr. Chairman, thank you for the opportunity to submit this testimony and for the support that this Subcommittee gave to St. Joseph's Hospital Health Center last year. St. Joseph's, located in downtown Syracuse, New York, is a non-profit 431-bed hospital and health care network providing services to Onondaga County and to patients from 15 surrounding counties. St. Joseph's is best known for its ranking as the #1 hospital in New York State for open-heart surgery in terms of lowest overall mortality rate. We are very proud of this ranking, which we have held for four consecutive years. What many people do not know is that we are also the largest hemodialysis center outside metropolitan New York. My statement is focused on these two areas of expertise at St. Joseph's and how we plan to initiate a chronic disease management model that will benefit our current patients with heart and kidney disease and enhance the quality of life for at-risk patients in the region. We see this initiative as one with not only health enhancement benefits but also with significant positive economic implications for the community and the region.

St. Joseph's provides over $7 million in bad debt and charity care to our service region. This comes to about 4 percent of our operating budget. This number has steadily risen over the years and we feel it will continue to do so unless some dramatic steps are taken. In order to increase access to patients who are underserved and at-risk for disease, we have implemented a program of "patient-centered care." We believe we achieved our #1 ranking for cardiac care through this process, which employs a secondary prevention model for disease management. By applying a multidisciplinary team approach to heart disease and preparing patients before surgery and rehabilitating them after, we have reduced mortality rates as well as the number of second hospitalizations. We have done this to improve the overall health of an underserved and underinsured patient base, but also for practical financial reasons. While our rehabilitation and education programs for our cardiac patients are largely unreimbursed, we are rewarded by having to perform less expensive charity care on patients who would typically end up back in the hospital without disease management.

Recognizing that early assessment is important to reducing the number of expensive treatments required later in life, St. Joseph's instituted a Wellness Place at a local mall so that people could stop in at their convenience. The Wellness Place provides free, general health screenings such as blood pressure readings, cardiac and diabetes risk assessment, counseling and patient education and seminars. Last year, approximately 15,000 people used the Wellness Place. Nearly 1000 of these people were determined to be at risk for heart disease, diabetes, or vascular problems. These individuals were offered follow-up services intended to change lifestyle, such

as nutritional counseling, smoking cessation, exercise programs and other similar regimens. They were also offered a choice of primary care physician if none was identified. This is all done at considerable unreimbursed expense to St. Joseph's but with the knowledge that a great deal of money will be saved in the long run—for the patient, the Medicare system and the hospital. The most dramatic economic implications I mentioned are encompassed within this concept—but not all. At risk patients are working people who may lose jobs if their disease progresses. It is important to realize, however, that patients with diagnosed diseases or who have congestive heart failure, may still work and lead productive lives if an effective disease management program is initiated at the earliest stage possible. The other economic benefits come in the form of the support required for this program. I will detail those later in this statement.

Assessment is the first line of defense in chronic disease management; but, there are many other factors involved after this step is taken. A program for management of disease must adequately educate patients and then foster a sense of individual responsibility for the importance of following prescribed regimens. This takes a great deal of initial monitoring and time spent with patients by telephone, at community health centers, and in the home. This also requires coordinated community participation by physicians, nurses, pharmacists, physical therapists, educators, behavioral specialists and even employers.

Diabetes, leading to kidney disease and kidney failure, is the most expensive disease in the country. The second most expensive, and #1 admitting diagnosis for Medicare, is congestive heart failure. The U.S. spends more than $7 billion annually in Medicare dollars for these diseases. The clinical relationship between chronic kidney failure and heart disease (e.g., high blood pressure) requires similar early intervention techniques as well as later management, treatment, and rehabilitation. Utilizing resources already developed and in place for our cardiac rehabilitation program, St. Joseph's is proposing to further develop a chronic disease management program focused on hemodialysis. Combining resources in this way will be cost effective and has the potential to radically change the management of kidney disease.

The specific objectives of the program will begin with early identification. Timely referrals to a nephrologist can be improved so that more aggressive treatment can be initiated to prolong kidney function and allow better preparation of the patient for dialysis. Second, we will identify, investigate, evaluate, and implement technology that will promote in-center self care and home hemodialysis modalities. The Aksys Corporation has developed a product that has the potential of achieving this objective. Third, we will utilize the St. Joseph's Cardiac Rehabilitation Model for the renal patient. This model will emphasize education and exercise with the goal of improving the percentage of patients that stay employed, reduce frequency and length of hospitalizations, and improve patient acceptance of and control over disease processes. Finally, we will apply our disease management techniques to our overall goal of reducing the percentage of candidates for kidney transplantation. The ultimate goal of the renal patient and the health care industry is to have renal patients lead a "normal" life. Currently, kidney transplantation is the modality that is most associated with that goal.

Our history of service and specialization in the areas of cardiac and kidney disease has proven that there is a demonstrable need for a chronic disease demonstration in these areas for the Central New York region. The demonstration will involve relationships and initiatives in Dialysis, Cardiac Care, Home Care, and Wellness. What we lack at this point, is a facility that can be shared by both cardiac and dialysis patients. Our current dialysis facility, the largest outside the New York Metropolitan area, is woefully inadequate in every way. The facility was originally built as a modular, temporary, unit over 20 years ago. We now treat our overload of patients in the hallways and have legitimate safety concerns that come with overcrowding and questions as to the future structural integrity of the plant itself. We have not replaced this facility for financial reasons but, fortunately, have been able to treat patients satisfactorily. We have three satellite clinics in the region that are also operating at capacity. Our goal is to implement our demonstration program in an on-campus facility that will provide the space needed for dialysis, exercise facilities, classrooms, meeting rooms, examination rooms, an acute kidney unit, and nurse and allied professional training space. Training of personnel is an important aspect of implementing an innovative chronic disease model.

In terms of economic development for the region, we believe that keeping our patients healthy and productive will have the most dramatic impact on the economy albeit in the long term. For the shorter term, we believe the training programs that we currently provide and will expand in areas such as home care, nursing, rehabilitation specialists, and counseling, to name a few, will bring employment opportunities to people in and around Syracuse. As we expand our efforts, we will likely train

people outside the immediate area to be able to serve the outlying areas where our satellite clinics are and in homes in more remote locations. The facility we envision will also provide many construction jobs over the next couple of years. The two-story facility, equipment and program operation will cost approximately $13.2 million. St. Joseph's has requested Federal partnership grant funding of $5.8 million that will also cover start-up operating costs. Our partnership funding request has increased over the past two year's by $300,000 due to our current need to upgrade our Acute Kidney Unit as part of our overall initiative. We estimate, based on our current services, that our operating budget will exceed $5.5 million per year.

As you know, St. Joseph's received $750,000 in fiscal year 1999 and $1 million from this Subcommittee in fiscal year 2000 to begin the planning and site preparation necessary for the new Center. We are very grateful for this support and urge you to complete this investment with an additional $750,000 million in fiscal year 2001 toward our total requested federal share for the initiative. Having made this request, which we realize is considerable, we would like to assure the Subcommittee that St. Joseph's will provide, through private sources, the remainder of the estimated total for this effort or $7.4 million.

We recognize the magnitude of this request but believe wholeheartedly that this facility, and the implementation of our chronic disease management model will repay this initial investment many times over in terms of Medicare savings and in terms of providing a national model for replication across the country.

Thank you.

PREPARED STATEMENT OF THE CHATHAM AREA TRANSIT (CAT), SAVANNAH, GEORGIA

Mr. Chairman, thank you for this opportunity to present a proposal for funding of a ferry service under the auspices of Chatham Area Transit (CAT), Savannah, Georgia.

I am Scott Lansing, Executive Director of CAT. CAT is a modest transit system, operating 63 vehicles in the Savannah area. Our ridership has been increasing over the past three years, and we are providing improved service to our riders and the Savannah region.

The purpose of my statement and request to the Committee concerns addressing unmet needs in our region and that of the neighboring State of South Carolina. We have a shortage of labor availability, and South Carolina has the labor force, but no viable manner in which to cross the river separating Savannah from the work force. We have developed a low cost solution to this problem. We propose to initiate a ferry service, and connecting transit routes, to bring the labor force to Savannah from neighboring jurisdictions in South Carolina. CAT will assume expenses for operation within our regular budget after the initial capital costs have established the necessary infrastructure to commence such a service. We earnestly request that this Subcommittee provide through the fiscal year 2001 Appropriations Act $650,000 for the costs associated with establishing this much needed transportation mode to the Savannah area.

The attached project description outlines the specifics of this proposal. Thank you for this opportunity to submit this proposal for your consideration. Coastal Area High Speed Passenger Ferry Service Project Narrative

Water borne transportation has long been a part of the coastal area's rich cultural heritage. From the cotton trade of the 1700's to today's container vessels, the Savannah River and its surrounding bodies of water continue to provide the community with economic benefit and recreational opportunities. The coastal area's future regional transportation needs will depend in large part upon leveraging this important natural resource. For this reason, CAT requests $650,000 to further develop high speed passenger ferry service in the Georgia/South Carolina coastal region.

The coastal area is enjoying unprecedented economic prosperity. Experts expect that trend to continue. Some have predicted that the region's population will double in the next ten years. Both government and the private sector have invested heavily in infrastructure improvements that will ensure the continuation of this growth. For instance, the Westin Hotel and International Trade Center, located on Hutchinson Island directly across the river from downtown Savannah, represent some $200 million of combined investment.

As part of the trade center development, Chatham County has already committed to building four new docking areas in support of the existing water ferry system. The water ferry system, now in operation with two vessels, will eventually be comprised of five boats. This service provides the vital link between the amenities on Hutchinson Island and historic Savannah.

Additionally, future plans for Savannah riverfront development call for establishing Savannah as a cruise terminal location. Within the next few years the Port Planning Committee hopes to have at least one cruise line operating from Savannah. Long term plans call for the development of facilities to support multiple cruise lines.

Growth in the South Carolina portion of the coastal area will also continue for the foreseeable future. Hilton Head, Jasper County, and Beaufort County have continued to enjoy their status as a destination of choice. Some eighty new golf courses are planned for construction in the near future.

Unemployment in the South Carolina coastal area is very low, and some estimate unemployment of less than one percent on Hilton Head Island. Unemployment within Savannnah's lower socioeconomic populations, however, is estimated at 8 percent. The ability to match the needs of two communities would provide jobs for Savannah residents and staffing for the South Carolina coastal area.

Finally, as populations and activity levels increase, existing transportation systems will become ever more congested and expensive to build and maintain. Travel times will increase, causing costly delays to individuals and businesses alike. As a result, opportunities for cross-marketing of the South Carolina and Savannah areas will be limited.

The opportunity for a cost effective water borne transportation system exists today. Such a system would have as its basis the following objectives:

—Alleviate demand on other transportation systems.
—Provide a cost effective and efficient means to connect coastal areas.
—Provide employment opportunities and meet employment demands on a regional basis.
—Increase tourism activity by providing a high quality ferry service.
—Enhance riverfront development and support cruise terminal activities.
—Provide kiss-ride opportunities for commuters.
—Seamless connectivity to other transportation modes.
—Increased cooperation of regional public and private partners.

Chatham Area Transit, in cooperation with regional partners, will conduct a thorough feasibility analysis and develop an operating plan. By creating such a plan, interested parties can more fully develop a means to successfully implement this very worthwhile and innovative project.

Tentatively, CAT envisions a three-hundred passenger high speed passenger ferry operating on a regular schedule. The total trip time from Savannah to Hilton Head and back would not exceed one hour, thereby allowing multiple trips per day. The ferry would provide for the easy and efficient migration of persons to and from Savannah, Hilton Head, and other portions of the coastal area.

Proposed budget for the requested funds is as follows:

Feasibility Analysis/Operating Plan	$100,000
Purchase of facilities and equipment	550,000
Total	650,000

To support ongoing operation of the ferry, CAT will identify additional revenue sources, such as Federal Transit Administration funds, state funds, local funds, and passenger revenues. Once in place, operation of the high speed ferry could begin as soon as two years after completion of the operating plan.

PREPARED STATEMENT OF THE INTERNATIONAL CENTER FOR CLUBHOUSE DEVELOPMENT

Mr. Chairman, thank you for this opportunity for the International Center for Clubhouse Development (ICCD) to submit a statement for the hearing record concerning fiscal year 2001 funding. The purposes of this statement are

(1) to provide the Committee an introduction to the work conducted by ICCD and its member clubhouses across the US and

(2) To present a $650,000 project proposal for your consideration under the CDBG account of the Department of Housing and Urban Development.

BACKGROUND

Mental Illness

The basic facts about mental illness are as follows:

—It is anticipated that one in every five adults will suffer from some sort of mental illness in their lifetimes;

—The Surgeon General's Report on Mental Illness states that 28 percent of the US population suffers from mental/addictive disorders in one year, of which 15 percent receive care/support from mental health services;
—The economic and personal losses from these disorders are massive and incalculable;—With the graying of America, there is a greater need and demand each year for community services to support the patient population and their recovery to a positive and productive life;
—Patients emerging from mental care face a difficult time in societal reintegration;
—Community based Clubhouses offer former patients much needed support services such as housing, medical services and vocational rehabilitation.

ICCD

The mission of the International Center for Clubhouse Development is to build and coordinate a strong network of clubhouse programs. ICCD clubhouses are founded on the realization that recovery from mental serious illness must involve the whole person in a vital and culturally sensitive community. A clubhouse community offers respect, hope, mutuality and unlimited opportunity to access the same worlds of friendship, housing, education and employment as the rest of society.

In pursuit of this mission, the center promotes the development and strengthening of clubhouses, oversees the creation and evolution of clubhouse standards, facilitates and assures the quality of training, consultation, certification, research and advocacy, and provides effective communication and dissemination of information. Clubhouses are composed of members, not patients. Membership comes with responsibility, respect and opportunity.

There are about 250 clubhouses in the US, with an average of 150 to 200 members per clubhouse. There are pending certification applications to the ICCD from noncertified clubhouses seeking ICCD certification.

ICCD trains and certifies staff and clubhouses across the US. There is a growing demand for clubhouse training and certification as increasing numbers of our society are diagnosed with mental and addictive disorders.

There are five training facilities in the US: New York City, Greenville, SC, St. Louis, Mo., Salt Lake City, Utah, and Worcester, MA. All training facilities follow the same rigid certification and training protocol.

ICCD has recently entered into a partnership with UMass Medical School in Worcester, MA. The partnership adds a prestigious research expertise to the ICCD and will enable scientific documentation of clubhouse performance and success.

There is always a struggle to provide trained personnel for staffing new clubhouses. In addition, clubhouse professionals trained and talented personnel, are in high demand for similar health care and management positions from State and private institutions with compensation packages that clubhouses cannot match.

FISCAL YEAR 2001 PROGRAM PROPOSAL

In order to maintain the standards of certified personnel within the existing or established clubhouse network and to train needed personnel for the growing number of clubhouses, the ICCD requests that $650,000 be allocated to the ICCD, which would allow clubhouse continuity and growth in providing opportunities and hope to our target population.

The funds would be used to better equip the ICCD core management functions and training capability to meet the growing challenges and demands of mental health services. The supply of qualified and trained clubhouse directors is currently insufficient to meet the requests for the establishment of new clubhouses.

The nonrecurring costs associated with this proposal would be used at the five training centers and in the ICCD headquarters in New York.

CONCLUSION

Mr. Chairman, thank you for this opportunity to present this proposal for a modest investment for fiscal year 2001 funding. The national benefit from this infusion of much needed resources will last far beyond fiscal year 2001, resulting in increased capacity to provide increased recovery and rehabilitation services to the portion of our nation's population that seek assistance in regaining their lives, independence and respect in society.

Thank you again for this opportunity to submit this statement for the hearing record.

PREPARED STATEMENT OF THE CITY OF NEWARK, NEW JERSEY

Mr. Chairman and members of the Subcommittee, thank you for giving us the opportunity to submit testimony about project under your jurisdiction that are critical to the people of Newark, New Jersey. 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. We have begun to turn the corner—there is a renewed vitality and sense of optimism in Newark.

Vibrant revitalization is ongoing in our downtown. The successful opening of the acclaimed New Jersey Performing Arts Center (NJPAC) in 1997—which includes a new public plaza open space; an adjacent waterfront development along the Passaic River—which is began construction by the US Army Corps of Engineers late this year; a minor league baseball stadium where the Newark Bears began to play last summer; and a planned state of the art sports and entertainment complex, all are changing the face of Newark. But we know that the renaissance of our City cannot just happen in the downtown business and arts center; it must also include the residents and their neighborhoods in meaningful, substantive ways. The proposals for economic development activities outlined herein may be disparate, but they all relate to improvements in the quality of life for residents of and visitors to Newark.

Newark is the largest City in New Jersey, with 275,221 residents in 1990, and ranks sixty-third in the nation in population. Newark's twenty-four square miles of land makes it the smallest of the country's top one hundred cities, with the fifth highest population density in the nation. Much of our land is taken up by Newark International Airport, higher education and medical facilities, and other institutional uses, increasing the density of our actual "livable" space. The median family income, according to the 1990 Census, was only $25, 816—as opposed to $47,589 for the State—and our population is five years younger than the State average. Twenty-nine per cent of our population was under the age of 18, and twenty-six percent lived below the poverty line. For people living in these conditions, there are basic needs which must be met: the availability of open space and recreation areas, the availability of jobs, and the availability of an infrastructure which is conducive to the development of neighborhoods, business and industry.

URBAN PARK RESTORATION INITIATIVE

Fundamental to the goal of bringing Newark back is the revitalization of its neighborhoods. Key to this improvement is the revitalization of municipal parks in some of our poorest and most densely populated areas, in full partnership with neighborhood residents and community based organizations. In fiscal year 2000 the VA/HUD Appropriations Subcommittee recognized the importance of this initiative by including a listing through the Economic Development Initiative for $300,000. In fiscal year 2001 the City is again requesting funds in the amount of $4 million for this important community investment project.

The City of Newark is seeking the support of this Subcommittee to help to implement the City's overall strategy for park and neighborhood revitalization. Based on community partnerships and a sense of pride and ownership, the children of Newark will truly have the opportunity to be a part of the City's renaissance. Projects have been selected in each of the City's five wards, with specific strategies developed for each. The City of Newark will make every effort to match dollar for dollar federal support through its operating and capital budgets, staffing and in-kind services. Support is also expected from the private sector, including foundations, corporations and individuals.

With federal support, the City's Department of Neighborhood and Recreational Services will embark on a community partnership for parks strategy, currently being tested in the largest municipal park, Jesse Allen Park. Signs will be posted in each park, and a local grassroots campaign with advertising will be coordinated to invite all neighborhoods surrounding each of the thirty-five small city parks to collaborate and make theirs a community park according to the established process. In each location, a "Friends Of" park association is being formed of citizens who live around the park, and anchoring community institutions, such as schools, the faith—based community, community development groups, and local agencies. Each association will be helped by the City to form a board, create by-laws, and become a 501c3 non-profit organization. Each group will be expected to get at least 10 percent of the surrounding neighborhood residents to join the association and donate at least one dollar, and will participate in joint orientation and training with peers from similar groups citywide. The City will award additional funds for that particular park, which the "Friends Of" group will help to administer to execute improvements and create programming. It is anticipated that funding will be in the amount of $1,000 per acre of park, plus matching with various foundation and corporate part-

ners who have expressed strong interest in aiding the resurgence of parks and neighborhoods.

Federal support will be utilized to match municipal capital investment in improvements. The City administration will maintain its current efforts and services, such as lawn mowing, trash removal and basic landscaping. In addition, our comprehensive strategy will include support from other municipal departments. The Engineering Department will address capital needs. They will develop comprehensive physical plans and drawings for each park, to be compiled in consultation with the community group. In addition, the Police Department has pledged to create walk-ride units of officers who patrol in and between specific parks, train watch groups who undergo association training, and organize police youth and adult athletic leagues to compete in the parks. The Newark Public Information Office will coordinate the communications and media strategy, both for initial outreach and with each association in determining its own campaign direction and format.

Specific municipal parks have been identified for participation in the demonstration project and unique strategies have been developed for each. For example:

—Riverbank and Independence Park in the East Ward. These parks are in the crowded Ironbound section, where the neighborhood has very little open space. The City is working with local groups to develop the designated park area near the Passaic River with jogging trails, soccer fields, and new open space.

—Jesse Allen Park in the Central Ward. This park is adjacent to one school and near several others. It was recently the focus of several discussions and meetings with community groups. It is in the heart of the City's poorest area, and has been subject to repeated vandalism. The City and the newly formed Jesse Allen Park Association are working jointly to develop and execute a plan that includes the refurbishment of ballfields, a revitalized playground, a new concert area, and security measures.

—Kasberger Field in the North Ward. These playing fields and recreation area are virtually hidden in the neighborhood in North Newark. It has attracted the attention and interest of many little league groups who want to help fix up the facility for ongoing use. A security fence, lighting and better drainage have been identified as vital needs.

—Boylan Center and West End Park in the West Ward. Boylan is the only City recreation Center in the West Ward, and West End is the only municipal park. Both need landscaping, furniture and signage to better serve their local area populations.

—Mildred Helms Park and St. Peter's Recreation Center in the South Ward. Mildred Helms is a long narrow park in the heart of a dense residential neighborhood. It adjoins an elementary school, but is littered with crack vials, debris and broken glass, and has broken playground equipment. Despite this condition, the area children play there daily, as it is the only open space in the immediate area. This is a site where neighborhood organizing will potentially enable substantial change in the environment. St. Peter's is a complex including basketball courts, a pool and a center building on the other side of the ward. This facility, too, is in need of community support to overcome chronic vandalism and return it to full utilization.

QUEENS/PEDDIE DITCH REHABILITATION

The second project is one that will have a tremendous impact on the redevelopment of industrial property close to Newark International Airport, known as the Airport Support Zone. In order to accommodate the expanding businesses which must be close to the airport and Port Newark/Elizabeth, adequate drainage and unflooded roadways are necessary. Queens/Peddie Ditches feed into the South Side Interceptor, and are the principal stormwater conveyances draining the southern part of the City of Newark.

The Queens and Peddie Ditches are the principal stormwater conveyances for the East and South Wards of the City of Newark. Both ditches feed in to the Southside Interceptor and are in desperate need of cleaning and reconstruction. The regulating chamber at the intersection of the Queens Ditch and the Southside Interceptor also needs massive reconstruction. In their current state, these conveyances do not provide the necessary stormwater capacities. The result is severe flooding in critical areas, including a large urban park, the Newark Airport Support Zone, and along Amtrak's Northeast Corridor Line. During Hurricane Floyd, flooding from the Peddie Ditch caused suspension of rail services.

The project is critical to the development of the warehouse/industrial complex along Frelinghuysen Avenue and the Waverly Yards property to support expansion of Newark Airport. Reconstruction of the South Side Interceptor will eliminate the

flooding problems on Frelinghuysen Avenue, especially in the vicinity of the critical connections with Route 22 and I–78. The removal of standing water will enhance the connections of this area to Newark Airport and further its development as an Airport Support Zone. The rehabilitation of the Queens Ditch will reduce flooding in the vicinity of International Way and Waverly Yards. This area is located immediately adjacent to the Northeast Corridor, the Airport Monorail Extension, and the proposed conference center and hotel complex.

The estimated cost of all required work is approximately $20 million. To date, the City has received an appropriation of $475,000 through the fiscal year 2000 VA/HUD Appropriations legislation. In fiscal year 2001 the City of Newark requests an additional appropriation of $2 million to complete the preliminary design and engineering and begin construction on this important project.

THE NEWARK MUSEUM SCIENCE INITIATIVE

The Newark Museum seeks $2.0 million to support its new Science Initiative Education. The City of Newark has committed $1.7 million dollars to date toward the preparatory collections care necessary to make this initiative possible. Additionally, The Museum is involved in a $5 million dollar operating endowment fund based upon a public/private partnership to assure adequate on-going support, of which $1.2 million has been raised to date. Research has shown that the ongoing maintenance cost of science galleries is several multiples of that of art galleries.

The plan calls for the creation of a major permanent exhibition based upon its natural science collection. The exhibition, called Making Sense of the Natural World, will explore scientific phenomena through natural history specimens and live animals. Museum audiences will participate in mindful science learning through stimulating and engaging experiences that integrate the collections, Dreyfuss Planetarium and Mini Zoo. This gallery, along with the Museum's plan to institutionalize cohesive science education programs parallel to its distinguished art and culture programs, is the core of The Newark Museum Science Education Initiative.

The cohesive science education at The Newark Museum will entail greater use and dissemination of their science gallery, planetarium and live animal resources, thus providing new learning opportunities for individuals, families, schools, and community organizations. This initiative also allows the Museum to safeguard the thousands of scientific specimens, so critical to its success, in proper housing both in the exhibition and in technologically advanced, environmentally appropriate behind-the-scenes storage.

The Newark Museum is recognized as one of the nation's leading cultural institutions. It is located in Newark, New Jersey's largest city, and within Essex County, the State's most densely populated. The Museum's constituency is economically and ethnically diverse, reflecting the distinctive character of the city, northern New Jersey and the metropolitan region. In 1998, The Newark Museum served an audience of 462,000 children and adults.

The Newark Museum's natural science collections of 74,000 specimens in the areas of geology, botany and biology are being utilized today in programs that allow for participatory and inquiry-driven experiences, to engage visitors in meaningful science learning. Science-related programs draw more visitors to The Newark Museum than any other offering, despite the fact that the science galleries have been closed for more than a decade. Realizing the opportunity to attract larger audiences and better serve Newark and New Jersey residents, the Museum has embarked on a new science initiative. It will enable the Museum to reopen the science galleries and builds upon the Museum's proven track record of excellence in interdisciplinary arts and humanities programs.

THE NEWARK MUSEUM NEW SCIENCE EDUCATION INITIATIVE: RESHAPING SCIENCE EDUCATION

In planning the new Science Initiative, Museum staff and Trustees have been guided by the principles contained in Goals 2000 and by New Jersey's recently adopted Core Curriculum Content Standards for K–12 education. Critical thinking, mathematical, and scientific understanding will be fostered as visitors question, experiment, compare, and analyze real specimens from the Museum's science collections, and participate in planetarium and Mini Zoo programs designed to effectively communicate complicated and abstract science concepts.

The science plan will also include a Science Resource Laboratory for teachers, which will provide them with a space to research and test curriculum ideas for hands-on activities in the natural and planetary sciences. Based on the results of research conducted with Newark educators, these monthly multi-session and one-time in-service teacher professional development workshops will provide teachers

opportunities to become more comfortable teaching science and meet the state-mandated re-certification requirements. The same Science Labs will be used by school classes and in after school and weekend programs to reinforce science concepts that are introduced in Making Sense of the Natural World, the projected new exhibition.

THE NEW NATURAL SCIENCE EXHIBITION, MAKING SENSE OF THE NATURAL WORLD

This gallery, intended primarily for a family and elementary school audience, will be one of the few in the country to combine the best of natural history museums and science centers by marrying actual biological, geological and botanical specimens with hands-on, inquiry-driven activities.

In this exhibit, visitors will experience the wonder of nature's diversity and then look at collections the way scientists look at them. They will begin to learn that natural history specimens individually and collectively provide volumes of information about science. They will understand how ordering the natural world led to the realization that the Earth is constantly changing and that life adapts to those changes. Moreover, they will appreciate that evidence of those changes is as close as their own backyard.

The consideration of this committee is deeply appreciated. Newark, New Jersey is looking forward to your support of this exciting project and its innovative partnership.

PREPARED STATEMENT OF THE CITY OF MIAMI BEACH, FL

Mr. Chairman and members of the Veterans Administration, Housing and Urban Development, and Independent Agencies Subcommittee: The city respectfully submits a community sustainability project for a discretionary fund set-aside through the fiscal year 2001 VA/HUD Economic Development Initiatives Program. The city-proposed set-aside of fifteen million dollars will be used toward the implementation of a citywide network of alternative transportation and bicycle/pedestrian/greenway trails, known as the Atlantic Corridor Green Way Network, which will help create additional economic development opportunities for Miami Beach. The cost of implementing the network is estimated at $35 million, of which $20 million has already been funded by or awarded to local government. Only the $15 million requested herein remains unfunded.

The Atlantic Corridor Greenway Network encompasses the trails along the Atlantic Ocean and Indian Creek Waterway, and several inland trails that will provide direct access to and from the various city neighborhoods, parks, entertainment, employment, commercial and business centers, including a residential causeway that reaches over Biscayne Bay and into downtown Miami. A listing of the elements of the greenway network is provided as an exhibit to this testimony.

This integrated network of greenway trails will snake its way along the citys parks, beaches, waterways, and other natural ecosystems, and will include rest areas, vistas areas, and water recreation areas, and interpretive signage throughout the greenways, to provide enhanced heritage and eco-tourism amenities and recreational opportunities for trail users.

The first segment of the greenway network, known as the North Beach Recreational Corridor-Phase I, will be constructed in 2001 as part of an economic revitalization plan for the North Beach area of the city. Other segments will follow as they reach full funding status. In addition, a project known as the Beachwalk Trail is also fully funded by the city and ready to be constructed, fringing the art deco historic district and the hotel area of South Beach, where the construction and renovation of several hotels and condominiums is underway, due to the ongoing investment interest in the area.

By connecting the Atlantic Corridor with improved transit sites in strategic residential and employment centers, as well as regional parking facilities, the network will encourage greater mobility. Enhanced mobility along the Atlantic Corridor will, in turn, encourage new economic development opportunities in Miami Beach by reducing the concurrency restrictions currently limiting new, compatible development and redevelopment projects, and by providing new venues for the city's fashion, film, and eco-tourism industries. These improvements will also increase local business support by residents and visitors and will encourage the cross-utilization of the city's cultural, environmental, and economic resources, creating a balance that ensures a sustainable future.

We wish to emphasize that a $15 million fiscal year 2001 discretionary fund set-aside by VA/HUD–EDI toward the Atlantic Corridor Greenway Network is critical to the long-term effectiveness of Miami Beach in sustaining and strengthening its position as the number one beach tourism destination in the United States.

In addition to the economic development initiatives mentioned previously, the city recognizes that housing is another key factor in sustaining the city's economic growth. Miami Beach has traditionally attracted a large resident elderly population, many of whom are retired persons dependent on fixed income social security insurance. Elderly households constitute the majority of the very-low income households residing in the city. Therefore, elderly households are often cost-burdened households and most of them are in need of assistance for housing, health, employment, and other services.

In collaboration with local housing providers, the city's housing division has established and currently funds a variety of housing rehabilitation programs to provide affordable housing to groups in need, including the elderly. As an U.S. HUD entitlement community, the city relies on limited federal funds for its housing programs. Currently, the city is establishing an elder affairs program, which will collaborate with the housing division, and will provide specialized referral services to the elderly population. This program will assist the elderly in achieving maximum independence and quality of life by establishing programs and services that empower them to age in place, in an elderly friendly environment with security, dignity and purpose.

Since housing is one of the most pressing needs of the elderly in Miami Beach, funding for elderly housing is a top priority for the city. Strong funding commitments for U.S. HUD entitlement programs, like CDBG, home investment partnerships program, and ESG program, are needed to continue assisting the elderly population. Expansion and increased funding of other U.S. HUD programs, including section 202 and section 811, is a highly needed investment for the elder community.

Your consideration is sincerely appreciated.

PREPARED STATEMENT OF THE UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY

The University of Medicine and Dentistry of New Jersey (UMDNJ) is the largest public health sciences university in the country. The UMDNJ statewide system consists of 3 medical schools, and schools of dentistry, nursing, health-related professions, graduate biomedical sciences and a school of public health. UMDNJ also provides clinical services through three core teaching hospitals, an integrated behavioral health care delivery system, a statewide system for managed care and affiliations with more than 200 health care and educational institutions statewide. No other institution in the nation possesses the resources, which match our scope in higher education, health care delivery, research and community service initiatives with state, federal and local entities.

Robert Wood Johnson Medical School is one of three schools of medicine at the University of Medicine and Dentistry of New Jersey. Nationally, RWJMS ranks among the top ten medical schools in the percentage of minority student enrollment. The school ranks in the top one-third in the nation in terms of grant support per faculty member. It is home to four major research institutes: the only NCI-designated Cancer Center in New Jersey; Advanced Biotechnology and Medicine; Environmental and Occupational Health Sciences, and Child Health.

We appreciate the opportunity to bring to your attention our priority project, the Child Health Institute, which is consistent with the mission of this committee. This project is statewide in scope and includes collaborations within the University system and with our affiliates. Our research projects also underscore UMDNJ's commitment to eliminating racial disparities in health care delivery and research. New Jersey with its small geographic size and its large diverse population is an ideal site in which to conduct research and develop activities that will address this important issue. The federal government has played and must continue to play a crucial role in funding biomedical research and economic development. We appreciate the strong support of this Congress to sustain the high standards of excellence in research and training sponsored by the NIH. The University's top priority project is the Child Health Institute of New Jersey.

The Child Health Institute of New Jersey at the UMDNJ-Robert Wood Johnson Medical School in New Brunswick, is a comprehensive biomedical research center focused on the health and wellness of children. The Institute has been established in recognition of the expertise that exists in developmental biology on the New Brunswick and Piscataway campuses. No other entity in New Jersey approaches the depth of human expertise, research achievements and technological resources that the Child Health Institute will bring together in the discipline of development. The Institute will address unmet needs of children and their families in the areas of pre-

vention, treatment and cure of environmental, genetic and cellular diseases including asthma, autism, diabetes, heart defects and birth defects such as cleft lip.

The Child Health Institute is integral to the long-term plan for the enhancement of research at RWJMS in developmental genetics, particularly as it relates to disorders that affect a child's development and growth, physically and functionally. The program will enable the medical school to expand and strengthen basic research efforts with clinical departments at the Robert Wood Johnson University Hospital, in particular, those involved with the new Bristol-Myers Squibb Children's Hospital.

The Child Health Institute will grow on a current NIH funding base at RWJMS and its academic partners of more than $50 million, $17 million of which has developmental biology as a focus. The Child Health Institute of New Jersey builds on existing significant strengths in genetic, environmental, and neurosciences research at RWJMS and the associated joint research and advanced degree programs with academic institutions and the pharmaceutical industry.

The Institute will be linked to the medical school and the Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital, the core teaching hospital of the medical school. Continued investment in research facilities will enable us to create a unique resource and build a world class infrastructure for child health to improve the lives of children and their families.

Disorders of health affecting infants and children exact a terrible toll in both human suffering and economic impact on families and the community. State and Federal public policy places a priority on efforts to prevent and treat childhood disorders. The prevention of conditions, such as autism, asthma, diabetes and birth defects such as cleft lip, has nearly incalculable benefits to society. The metropolitan New York/New Jersey region does not have an academic research center designed specifically to address issues of child health. Approximately half of the admissions to a children's hospital are for genetic disorders. By far the majority of these are polygenic or multifactorial; that is, they are the result of groups of genes interacting among themselves and with the environment.

The Child Health Institute will focus research on the molecular and genetic mechanisms that direct the development of human form, subsequent growth, and acquisition of function. Broadly, the faculty and students will investigate disorders that occur during the process of development; to discover and study the genes contributing to developmental disabilities and childhood diseases; to determine how genes and the environment interact to cause childhood diseases; and to identify the causes and possible avenues of treatment.

As an example, asthma-related problems have risen by 50 percent over the past decade with hospitalization rates 4 to 5 times higher for African Americans. Effective prevention and treatment will require more exacting understanding of the molecular mechanisms of the stimulus-receptor reactions that elicit asthmatic attacks. Continued exploration of the basic molecular underpinnings of injury reactions will lead to more rational methods to prevent, minimize and treat asthmatic reactions and deaths. Urban academic medical centers such as RWJMS are at the epicenter of the current escalation in asthma and the Child Health Institute is well positioned, in conjunction with other institutes at the medical school to address this critical issue.

Another example of important research is the role of smoking in development. It is now known that smoking plays a key role in the development of the cleft lip of the child of a smoking mother. What we are just learning and applying is the effect of smoking cessation on the developing child: if otherwise healthy mothers who have a silent gene mutation stop smoking she reduces the risk of her child developing a cleft lip five fold.

Research with folic acid represents another potential area for collaboration. Folic acid prevents neural tube defects in infants when taken by pregnant mothers. Folic acid also plays a key role in the treatment of some childhood leukemias. In partnership with our NCI designated Cancer Institute, the researchers at the Child Health Institute will seek the answers to overlapping and interrelated questions.

While the devastation of childhood diseases and injury can be horrific, amazing breakthroughs in treatment and new drugs or surgical techniques are occurring. These breakthroughs require painstaking research and testing, significant financial support, and a concentration of basic and clinical research expertise and potential research subjects in a controlled environment.

Unfortunately, the lack of such a statewide focus in developmental biology has limited New Jersey's participation in and access to leading edge research, clinical trials and beta-site technology. The building of the Child Health Institute in partnership with the Bristol-Myers Squibb Children's Hospital will allow New Jersey to assemble the research faculty and clinical experts necessary to compete for the advanced basic science and clinical research projects that currently are out of reach.

Also, the critical mass of expertise provided by the Institute will hasten the pace at which theories become therapies in New Jersey through its educational opportunities and sponsorship of new technology.

The Child Health Institute will serve as a magnet for additional growth in research and health care in the region. New Brunswick has emerged as the premier "Health Care City" in New Jersey through the efforts of UMDNJ, its schools and affiliated hospital network, and the ongoing support of Johnson and Johnson, the largest manufacturer of health care products, and the Robert Wood Johnson Foundation, one of the largest philanthropic foundations in the world. The Institute will continue to promote the development of new partnerships with other affiliated hospitals and with the multinational pharmaceutical, biotechnology and chemical industries in New Jersey.

The Institute will encompass 83,000 square feet, with more than 40 research labs and support facilities. Fourteen senior faculty will direct teams of M.D. and Ph.D. researchers, visiting scientists, postdoctoral fellows, graduate students and technicians for a full complement of some 130 employees.

At maturity, the Institute is expected to attract $7—$9 million of new research funding annually and its total annual operating budget is projected to be between $10—$12 million. The economic impact on the New Brunswick area is estimated to be between $50—$60 million per year.

The best science requires creative scientists working in state of the art buildings using state of the art equipment. The construction of the Child Health Institute at RWJMS will fill a critical gap through the expansion, by new recruitment, of an intellectual base upon which basic molecular programs in child development and health will build. Construction costs for the Institute are estimated at $30 million, with about half of that amount associated with local employment.

We respectfully request $5 million for infrastructure development of the Child Health Institute. These dollars will complement the $1 million we have already received from this committee with the generous and strong support of Congressman Frelinghuysen and other members of the NJ Delegation and the $2 million funding we have already received from the Labor/HHS Appropriations Subcommittee. We have raised an additional $18 million in the private sector from individuals, industry and foundation sources and we expect to raise $10 million from the State of New Jersey. This combination of state, federal and private resources will enhance UMDNJ's commitment to children, health care and the economic development of our communities.

We thank the members of this Subcommittee for your leadership in supporting national and international research and development initiatives. This committee has been a strong supporter of the universities and research institutions in this country. Your leadership on many biomedical initiatives is especially appreciated.

PREPARED STATEMENT OF THE CITY OF DAYTON, OHIO

Chairman Bond, Ranking Member Mikulski, and Members of the Subcommittee, thank you for the opportunity to submit the following testimony which briefly details an extraordinary opportunity to redevelop a brownfield property for which we are seeking your support in the amount of $2 million.

Historically, the city of Dayton had a large and successful manufacturing base. At its peak in 1960, Dayton's population swelled to over 260,000. However, between 1970 and 1995, Dayton lost almost 40,000 jobs and 100,000 residents. Many factories were closed and over the years the weather, vandals, and owners' neglect turned those factories into eyesores, then nuisances and finally, brownfields.

While there are over 25 brownfield sites in the city of Dayton, we have identified ten we believe to be most compelling. These ten total over 135 acres of valuable land that should be returned to safe and productive use. Most of these sites are in economically disadvantaged and minority neighborhoods and in addition to their blighting influence on these neighborhoods, they represent 3,620 jobs and $2,788,000 annual revenue lost to the city.

TOOL TOWN PROPOSAL

There is a current proposal to create Tool Town, an innovative industrial campus, on the Harrison property, a pivotal 35 acre brownfield located in downtown Dayton. Tool Town is a concept that was created by an industry-driven tooling and machining task force during the development of the comprehensive plan for the city of Dayton. It is a precision metalworking park that will concentrate tooling and machining companies, support services, and educational opportunities in a unique campus-like environment. It will provide the opportunity for companies to share equipment,

staff, and resources and to cooperate in new ways. This unique approach will not only support the region, but also help the tooling and machining industry compete globally and retain these high-paying jobs in the United States.

The Harrison property was identified by the task force as presenting an excellent opportunity for redevelopment and as a good site for Tool Town. The redevelopment of this particular property is especially important due to the revitalization of this area of Dayton, known as Webster Station. Webster Station is home to Dayton's Fifth Third Field; RiverScape project; and the Cannery, a redevelopment project that includes loft housing and street-level commercial development.

In the short term, Tool Town would provide a home for 23 businesses employing over 1,500 people, and through its growth over the next 20 years, would house over 80 tooling and machining businesses and still have the capacity for additional growth. Just within the city of Dayton, this industry would be the direct supplier of 5,600 new jobs and the generator of an equal number of new, spin-off jobs.

Ensuring the success of the tooling and machining industry will help accomplish goals established in our comprehensive plan, including increased per capita income, poverty reduction, revenue generation, and job creation. These goals are relevant to the entire region, especially in areas that formerly were centers of manufacturing and distribution and whose citizens have suffered the most from the loss of those industries and the impacts of urban sprawl. The creation of Tool Town will support the long-term viability of the tooling and machining industry and provide jobs for people who need them.

Tooling and machining businesses can provide secure, well-paying jobs with benefits and the potential for advancement. The jobs are available to a high school graduate after a nine month training program at Sinclair Community College, also located in downtown Dayton. Sinclair has a tooling and machining certification program that is recognized as the best in the United States. The average graduate has a minimum of three job offers and all graduates get jobs. Beginning in April 2000, Sinclair will also offer advanced training that will produce "top gun" machinists. The Tool Valley Foundation is working with Dayton Public Schools on a possible joint venture that could be located at the Tool Town campus.

The Miami Valley region is the fourth largest concentration of tooling and machining industries in the United States and has tremendous strengths and a wide breadth of capabilities. A recent survey of 11 counties in this region indicates that there are currently over 825 companies employing approximately 26,000 people. This represents a $1 billion yearly payroll and $2.2 billion annual sales revenue.

The industry is growing in our region. In the last five years, the number of jobs in tooling and machining has increased by 22.7 percent. This is compared to a total employment growth rate of 5.3 percent in the Dayton-Springfield area and 7.1 percent in the state of Ohio.

PARTNERS

There is a network of partners already involved in and committed to the tooling and machining industry and the redevelopment of the Harrison property. Partners at the local level include public and private organizations such as the Dayton Tooling and Machining Association, whose members contributed $250,000 to provide two years operating capital for the Tool Valley Foundation; Montgomery County; Sinclair Community College; and the Miami Valley Regional Planning Commission.

Local funding contributions toward tooling and machining initiatives represent over $1.7 million, including the construction of the Dayton/Miami Valley Entrepreneurs Center, an Edison technology incubator to be located in Tool Town. Local in-kind contributions represent $835,000 worth of staff time dedicated over the next three years to implement these initiatives. At the state level, the Ohio Department of Development has pledged operating funds for the Entrepreneurs Center of up to $200,000 a year.

The federal government is also partnering on the redevelopment of this property, including awarding Dayton a U.S. EPA Brownfield Pilot Program grant, a TCSP grant from the Federal Highway Administration, a $200,000 EDI award, and $1.1 million toward the Entrepreneurs Center contributed by the U.S. EDA. In addition, the city of Dayton has spent $670,000 of our HUD funds on the acquisition of a former foundry that will be part of the complex developed on the Harrison site.

CONCLUSION

The United States is facing stiff economic competition. The global market presents opportunities, but there are those who are working hard to take lucrative businesses away from the United States. The Pacific Rim countries already have 40 percent of

the world market in tooling and machining, equivalent to the United State's share, and their stated plan is to acquire 80 percent of it.

Facing these challenges requires a new paradigm for business. It is critical for Dayton to have the opportunity to help develop this new paradigm. The acquisition and redevelopment of the Harrison property to create an innovative industrial campus, such as Tool Town, will provide Dayton this opportunity. Its implementation will also provide a national demonstration project of a new way for businesses to work together to meet future challenges.

The redevelopment of the Harrison site will also demonstrate the feasibility of reusing brownfields. A major brownfield project in our region will stimulate similar activities on other underutilized and abandoned industrial sites. Its location in the urban core permits economic development without additional major investments in public infrastructure by reusing the existing roadways and utilities that are already adequate to support full development of this site.

PREPARED STATEMENT OF THE BABYLAND FAMILY SERVICES, INC.

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to submit testimony to the Public Witness Hearing Record regarding a model educational program that will close the "digital divide" among minority inner city children and families. Babyland Family Services (BFS) is a major non-profit child and family service organization, founded in 1968 in Newark, New Jersey, that provides comprehensive child and family development services at 14 sites to 1,500 at risk children and their families each year. The Annie E. Casey Foundation, a national leader in children's issues, highlighted Babyland in its annual 1998 Kids Count report as a model in community-based child and family development. BFS was also one of a select number of agencies that received a 1999 Century of Caring award, from the NJ Division of Youth and Family Services (DYFS), for its service to children and families. Babyland has also taken the lead on several community-wide initiatives: Success By 6, Family and Children Early Education Services (FACES), Abbott Preschool Family Worker Program, and the Pediatric Asthma Reduction Effort (PARE). These initiatives include collaborations with over 30 other child care centers, several public and parochial elementary schools, and several service providers. Together these initiatives serve over 5,000 children and families.

BFS integrates its wide network of services in order to enable each child and individual to reach their potential-intellectually, emotionally, spiritually, socially, and physically. Babyland's holistic philosophy-integrating child, family, staff and community development-serves as a model and has been studied by other communities throughout the nation and as far away as South Africa. Babyland serves at-risk children (from infancy to 18 years old), parents striving to be self-sufficient, teenage parents (including young fathers), struggling families and distressed neighborhoods.

BFS programs provide a continuum of educational services to individual children as well as multiple support services for family members. By virtue of this continuum, the agency is able to build extensive relationships with families and to provide follow-up care. As a result, BFS is in a unique position to launch and oversee a major computer and technology initiative that will provide extensive training and technology support for individual families having no other tangible means of becoming computer literate or of acquiring the requisite skills necessary to be informed and self-sufficient. This initiative would empower not only present clients but also those who will receive BFS services in the future.

BFS services include:

Quality child care for children under three years old, through the Early Head Start Program; Early childhood education for preschoolers; After school and summer enrichment programs for school-age children; Pediatric health services, including a pediatric AIDS and asthma program; Parent education for teenage mothers and pregnant women, young fathers, severely distressed parents, foster parents, and grandparents; Emergency shelter and counseling for battered women and children; Foster care homes for boarder babies and sibling children; Self-sufficiency services that include: life skills, family literacy, substance abuse and mental health counseling, and employment training/placement in conjunction with networking partners; Training in the areas of child development, domestic violence, foster care, family support, health and parent leadership; and Community organizing and neighborhood leadership training for parents and residents.

Computer technology is transforming the economic and social landscape of this country by offering information and educational opportunities for individual growth and community development. Inner-city children and residents are inadequately prepared to take advantage of these growth opportunities. If the gap in information

technology—the digital divide—is not bridged, a large segment of society will be further polarized and left without the tools needed for full participation in society. Specifically, BFS is seeking to establish the telecommunications linkages necessary for the educational development of 670 children and to provide computer and technology training for 2,000 parents, teachers, and employees. As a result, this initiative will strengthen children's educational skills; promote the self-sufficiency of and enhance the educational skills of parents; enable the agency to better track child and family needs in order to enhance client services; and link the community to local and national resource centers. The proposed technological network will link center and home-based child care facilities; community resources and service providers; educational, economic and resource information sources; training centers and administrative offices. The establishment of this network will be a model for educating urban children and serve as a conduit for comprehensive family support services.

The Specific Provisions of the BFS proposal include:

Computer hardware and software (technical assistance, installation and wiring, modems, printers etc.) for children, parents and residents, and teaching/social service staff in classrooms, homes and social service offices.

Technology Center, as part of a new multi-purpose community resource center, that will provide distance learning, professional development and training in basic and advanced computer and technology skills for low-income parents, neighborhood residents and entry-level employees.

Computer Training, Curriculum Development and Professional Development for children, parents and residents, educational and social services staff, as well as national and international community-based family service providers.

The initiative will benefit:

Preschoolers (550) at eight centers and 120 school-age children (after school/summer enrichment programs) at five centers.

Parents and family members (1,750) at 13 Babyland sites with links to community resources;

Agency Staff (250) for client tracking purposes; training and professional development; and access to community resources to be provided through workstations and/or palm pilots for caregivers/teachers and social service staff. Parents and children in the home for educational instruction and support, economic and resource information, links to other parents and teachers, parenting education (child and family health, child behavior and development, cultural sensitivity, etc) and professional education (ex. Certifications, GED, etc.).

Family day care homes with links to community resources, professional education, BFS child care centers and other child and family resource centers.

Child and family service providers throughout New Jersey, the nation and South Africa.

The BFS digital divide initiative will seek specifically to greatly enhance:

—Early childhood development and education for young children (three to 13 years old).
—The ability of inner city residents, especially low-income parents and teenagers, to learn computer and technology skills.
—Tracking of 1,500 children in center- and home-based child care facilities; teenage parents and victims of domestic violence; homeless families; foster children and families.
—Provision and delivery of professional development for BFS staff and parent education programs and curriculum development efforts.
—Delivery of clinical and therapeutic services to parents and children.
—The ability to fulfill State and Federal reporting requirements.
—The ability to provide consultation to international family service providers.

Current BFS parent and staff training programs that will be continued and expanded through the implementation of this initiative include:

—Foster parent training for over 300 candidates;
—Domestic Violence training for nearly 40 community staff;
—Family Worker training for over 50 Abbott Preschool family workers;
—Child care training and accreditation for nearly 100 child care staff from 30 centers;
—Parent leadership training for 30 parents from three public schools, through a grant from the Victoria Foundation
—Family literacy training for 40 parents; and
—Family day care training for 20 family day care providers.

Of particular note, Babyland established an international training program with the Goldfield Metropolitan Corporation, a community-based organization in South Africa, in order to exchange information on child care, community development and

family services. In 2000, we are looking forward to providing distance learning for over 100 parents and staff at the Early Head Start Program.

Mr. Chairman, as your Subcommittee deliberates funding requests from many qualified candidates coming to you for assistance this year, I urge you to review and consider our request for a $1 million Economic Development Initiative Grant to bridge the digital divide among inner-city families in Newark. We make this request in order to help us fulfill our mandate as a provider for thousands in our city but also, in return, to act as a model for other agencies in cities around the country who may also be able to help the technologically disadvantaged gain access to the resources and skills necessary to survive in the 21st Century.

Thank you.

PREPARED STATEMENT OF THE AMERICAN ASSOCIATION OF HOMES AND SERVICES FOR THE AGING

The American Association of Homes and Services for the Aging (AAHSA) is pleased for this opportunity to present testimony on the fiscal year 2001 budget request for the U.S. Department of Housing and Urban Development (HUD). As you may know, AAHSA is the largest organization representing non-profit sponsors of senior housing who own and manage over 300,000 units of market rate and federally assisted housing—including the largest number of sponsors of HUD Section 202 elderly housing facilities. As a stakeholder in helping to meet the suitable and affordable housing needs of older persons, the budget proposals for federally assisted housing affecting elderly Americans are critically important to our association.

OVERVIEW

As we have stated in previous testimony, as non-profit sponsors of elderly housing we respond to different motivations in developing housing for the poor, the needy, and the frail elderly. Our motivation is born of mission not profit. Ours is a mission of helping those whose needs are the greatest and of striving to provide housing and supportive services to all low-income elderly who need it. However, ours is a daunting task, borne out by the increasing elderly demographics and the critical shortage of housing and services by our nation's elderly. In its March 2000 report to Congress on "worst case housing needs," HUD finds there is a "worsening crisis" in rental housing assistance. Despite a continuing, robust economic expansion, worst case housing needs have reached an all-time high of 5.4 million families containing some 12.3 million individuals. Of those 12.3 million persons, over 1.5 million are elderly, and between 1991 and 1997, the number of elderly persons with worst case housing needs increased by eight percent. A recent Harvard University study finds that renter households headed by a person aged 65 or older in 1995-one fifth of the elderly population-had a median net wealth of only $6,460, underscoring the fact that a large population of the elderly remain poor, with limited access to affordable housing options and services that are most appropriate for them.

Last year, the Administration responded to several years of Congressional coaxing and industry advocacy to address some of the challenges presented by graying of America in proposing a continuum of care for the elderly as a part of their Housing Security Plan for Older Americans. We commend the committee for its interest in ensuring that increasing numbers of elderly persons are adequately housed with access to appropriate services. Due to the outstanding leadership of this committee, many provisions establishing a continuum of care for the elderly program, as recommended by the Administration and as a part of the overwhelmingly House-passed H.R. 202, the "Preserving Affordable Housing for Senior Citizens and Families into the 21st Century Act," were adopted by Congress in last year's fiscal year 2000 HUD budget, and serve as a foundation for the Administration's budget proposal in fiscal year 2001.

FISCAL YEAR 2001 HUD BUDGET: CONTINUUM OF CARE FOR THE ELDERLY PROPOSAL

The Administration's proposals build on last year's success by expanding the continuum of care for the elderly. HUD's Housing Security Plan for Older Americans—"ensuring lifelong security"—would combine new and existing HUD programs; improve coordination with other federal assistance; create a comprehensive and cost-effective senior housing system that preserves security and independence; and include elements of the Housing Security Plan that were not passed by Congress last year. The funding total for the continuum of care proposal is $779 million; however, there are three set-asides in the proposed budget totaling $150 million, and we believe modifications to the proposal and the funding are needed.

Additionally, while we have high interest in other parts of the Administration's budget proposal, including sufficient funding for Section 8 expiring contracts; funding for the Section 811 program, HOME, and CDBG; and adequate housing vouchers, the focus on a continuum of care for the elderly is unique to AAHSA, and our testimony will focus on the Administration's continuum of care for the elderly proposal.

Section 202.—In announcing the fiscal year 2001 budget proposal for the Section 202 program, the Administration called Section 202 the "bedrock of HUD's elderly housing programs." We agree. HUD proposes $629 million for capital advance and project rental assistance to produce new construction units under Section 202. While this is an increase over the current level and given the tremendous need, we do not believe it goes far enough, and sets a funding baseline for the program that is well below last year's $700 million House-passed authorized level in H.R. 202. As clearly evident by long waiting lists, projected increases in the elderly population, and the emerging recognition of the role of elderly housing in long-term care strategies, the need for new development funding is obvious. We have seen Section 202 funding trend downward from $1.279 billion in fiscal year 1995, to $830 million in fiscal year 1996, to $645 million in fiscal year 1997, where it has since hovered in the $600 million range despite demographics, need and demand for the program. At least for the past six fiscal years, only 30 percent to 40 percent of eligible Section 202 applications are able to be funded. After many years, even the Administration is recognizing that housing vouchers do not add to the supply of affordable housing, and new production development programs are critical to meeting the demand for affordable housing.

We also understand that HUD will propose statutory changes in their budget proposal permitting Section 202 to leverage other financing, including low-income housing tax credits. Last year, we urged the committee to encourage flexibility in the Section 202 program to enable mixed-financed, mixed-income, and mixed-use facilities. We supported flexibility which allows use of Section 202 funds for acquisition, modifies income limits in high vacancy areas, and allows Section 202 funds to be used in conjunction with other federal and non-federal financing sources. We stated, the "other sources of financing" feature would be particularly useful in coupling Section 202 with low income housing tax credits to develop and increase the production of new housing units, and expand the range to low- and very-low-income elderly. In last year's conference report to the fiscal year 2000 HUD budget, this committee urged HUD to explore alternative financing sources including allowing owners of Section 202 to be eligible for low income housing tax credits and the equity financing it generates by enabling projects to become the sole general partner of a for-profit limited partnership as long as the general partners meet the definition of private non-profit sponsors. Understandably, this was a recommendation we supported and is a change we would heartily welcome. In regards to the Administration-proposed set-asides under the Section 202 program, these set-asides are intended for other discrete housing programs. While all of these programs serve the same low-income and frail elderly population, we believe they are for distinct purposes and their funding sources should reflect that distinction under separate funding streams.

Similar to last year, we strongly support much in the Administration's continuum of care proposal, but some refinements are needed. Therefore, we encourage you to establish a separate Continuum of Care for the Elderly account under the Housing for Special Populations account, and restore funding under the Section 202 program to $700 million in fiscal year 2001 for new construction development and project rental assistance. We urge Congress to provide an additional $35 million for the Section 202 program to be available for mixed-financing in leveraging other development financing sources and enabling greater program flexibility. Program flexibility should include a change in statute to enable linkages between Section 202 and the low income housing tax credit program.

Service Coordinators and Congregate Services: HUD proposes $50 million for an expanded service coordinator program to serve residents of HUD-assisted elderly housing and other eligible elderly living in the project's neighborhood, and for continuing existing congregate service contracts. The use of service coordinators in elderly housing facilities is an integral part of the continuum of care, and helps the frail elderly to live independently with dignity and respect, and often defer or delay their need to move to a higher level of care.

The Administration's $50 million expanded service coordinator program would be instituted as a set-aside under the Section 202 program. We agree with, and support expanding the service coordinator program, including serving the nearby elderly non-residents. However, for the reasons outlined above, we believe funding for service coordinators should be under an account separate from the Section 202 program,

particularly since service coordinators are funded in all types of federally assisted elderly housing, including Section 236, Section 221(d) and Section 231 facilities.

Funding for service coordinators is never sufficient to meet the demand (last year only 55 applications were funded out of 345 submitted) and HUD continues to conduct a lottery in order to award service coordinator grants. We appreciate the leadership action by this committee last year in appropriating a substantial increase of $50 million for service coordinator and congregate services funding, a level consistent with the funding originally provided when the service coordinator program was first established. However, if the unfunded eligible applicants from last year resubmit this fiscal year, and expiring service coordinator and congregate services contracts are funded, $50 million will once again be insufficient to meet the demand for service coordinators. Since last year's unfunded applicants will receive a preference, new applicants in fiscal year 2001 will not have any possibility to receive a grant. Increasing the $50 million proposal to $75 million will enable HUD to renew expiring contracts, fund last year's eligible applicants, and offer service coordination to new applicants.

In addition, we reiterate our position that Congress establish a more reliable and stable source of funding for service coordinators, as a part of a facility's routine operating expense, and allow grant recipients the option to build the cost of service coordinators into their operating budget upon the expiration of the grant. Finally, because many elderly housing facilities are at the peak of the fair market cost limits on their Section 8 contracts, and thus prohibited from employing a service coordinator, Congress should waive the Section 8 annual limits for facilities seeking to employ a service coordinator.

Therefore, we urge Congress to establish a continuum of care for the elderly account in fiscal year 2001 and provide at least $75 million in funding for 1) renewal of expiring service coordinator and congregate housing contracts, 2) unfunded eligible service coordinator applications from last year, 3) new service coordinator contracts, 4) expansion, to enable service coordinators to serve other residents residing in the community, and 5) statutory language that provides: a) the cost of a service coordinator program is exempted from the annual limits on expiring Section 8 contracts; b) costs proposed for any service coordinator program shall not exceed comparable market costs for the local jurisdiction; and c) insured or assisted housing projects without project-based Section 8 rent subsidy shall have existing service coordination grants continued through Section 8 amendment funds.

Assisted Living Production.—HUD proposes $50 million in five-year operating subsidies as a set-aside under the Section 202 program to construct new affordable assisted living facilities to serve 1,500 low-income elderly. The funding would be linked to the Section 232 FHA insurance program to directly subsidize no more than 20 percent of the units in any given facility, thereby creating 7,500 new assisted living units. According to HUD, funding would go to states and localities offering the most innovative proposals that combine their service funds with HUD funds, and awarding both to qualified local developers. HUD believes that linking operating subsidies with FHA insurance will encourage banks and developers, who are only familiar with the higher-income assisted living market, to spur production of affordable assisted living.

We enthusiastically support this proposal, particularly since the great need for affordable assisted living continues to grow. We believe it is good public policy for federally assisted housing programs, such as FHA mortgage insurance, to serve those whose low-income level would ordinarily prevent them from being served in the open market. To the extent that this proposal would target the lower-income, frail elderly needing the level of services provided by assisted living, we applaud HUD for taking this first step forward. However, as stated earlier, we believe the operating subsidy funding for this program should be under an account separate from the Section 202 program. Section 202 operating funding, in the form of a project rental assistance contract (PRAC), is specifically for non-profit sponsors and, unlike other assisted housing operating subsidies, is not budgeted or used for mortgage-debt payments. Since most developers currently using Section 232 for assisted living are for-profit, we expect that most developers using this affordable assisted living option will also be for-profit. We would prefer to maintain the integrity of the 202/PRAC by maintaining it for only non-profit sponsors. Therefore, we urge you to establish a separate Continuum of Care for the Elderly account to fund the HUD-proposed affordable assisted living program at $50 million in operating subsidies, separate from the Section 202 account.

Assisted Living Conversion.—Continuing and building upon last year's initiative, HUD proposes $50 million for an innovative, competitive grant program in fiscal year 2001 to convert all or part of some existing Section 202 projects to assisted living facilities through rehabilitation, modernization or retrofit. HUD recently issued

a fiscal year 2000 notice of funding availability implementing the assisted living conversion program (ALCP) for Section 202 facilities. We are strongly supportive of the use of grants for conversion of Section 202 facilities to assisted living, however we would urge that other non-profit sponsors of existing federally assisted elderly housing also have the opportunity to access grants for conversion to assisted living as originally proposed in H.R. 1624, the "Elderly Housing Quality Improvement Act." Many of our members, including Section 236, 221(d), and other federally assisted housing members, have also expressed interest in participating in this program, and we believe limiting eligibility to only Section 202 facilities is an artificial restriction. Therefore, we urge Congress to establish a continuum of care for the elderly account in fiscal year 2001, separate from the Section 202 account, that does not restrict eligibility to Section 202 facilities, but provides $50 million in grants for conversion of any non-profit federally assisted elderly housing units to assisted living.

Modernization and Retrofit.—Although the Administration's continuum of care for the elderly proposal does not include modernization and retrofit to accommodate aging buildings, and buildings which need to be adapted to facilitate supportive services, we believe this is an issue of sufficient concern which the committee should address. Just as our residents are aging-in-place, our housing is aging, and is in need of modernization and retrofit. H.R. 1624, before it was incorporated as a part of H.R. 202, would have established a $100 million capital grant program for the rehabilitation, modernization, and repair of most project-based federally assisted elderly housing, besides allowing for conversion of elderly housing units to assisted living. AAHSA has repeatedly urged Congress and the Administration to establish a modernization and retrofit program to address the problem of aging buildings. Since the loss of the Flexible Subsidy program and non-implementation of Project Retrofit under the Congregate Housing Services Program authorized in the 1990 National Affordable Housing Act, there has not been a federal program to specifically fund the modernization of federally assisted housing facilities. This should be corrected. Therefore, we urge Congress to establish a continuum of care for the elderly account in fiscal year 2001 that provides up to $50 million in funding for the rehabilitation, modernization and retrofit of project-based federally assisted elderly housing, in order to meet the long term physical plant needs of elderly housing facilities.

Intergenerational Learning Centers.—Similar to last year, HUD proposes to use up to $5 million of assisted living conversion funds to provide space within elderly housing facilities for intergenerational learning centers that would offer affordable senior services and affordable child care. According to HUD, these centers would also serve as a focal point for sharing Internet technology. This co-location approach, of locating services and service providers on or in close proximity to elderly housing facilities, has long been promoted by AAHSA. However, we would expand the eligible use of funds to other co-location activities, including adult day care, senior centers, home health care centers, and other types of services and service providers. And, since we view these types of co-located facilities and services as community-oriented, and resources for the community-at-large, we believe another appropriate funding source is the community development block grant. Therefore, we urge Congress to support a continuum of care for the elderly account in fiscal year 2000 that provides up to $5 million in funds for co-location activities, including child and adult day care; and to provide language that encourages the use of funds from the CDBG account for co-location.

Existing Housing Preservation.—Though not a part of the continuum of care proposal, another critical concern to AAHSA is the preservation of existing affordable housing for seniors. As you know, between 1996 and 1998, almost 100,000 affordable assisted housing units were lost because of opt-outs and prepayments, including a large number of elderly housing units. AAHSA urges Congress to focus on strategies that encourage non-profits to acquire existing facilities whose owners choose to opt out, including shifting available resources to an alternative site in the same community or reallocating the Section 8 contracts, and encourage partnerships between local governments and non-profits to develop alternative sites for affordable housing.

CONCLUSION

Thank you for providing AAHSA the opportunity to testify on the fiscal year 2001 budget request for HUD. We are thankful for the leadership this committee has provided in affordable elderly housing, and we are pleased to be able to contribute to the committee's deliberation on these critical issues. We urge your support for the recommendations outlined in our testimony, and we hope that our comments will assist in helping you craft a budget that is responsive to the increasing needs of

low-income elderly persons. If you desire additional information, please contact Gerard Holder, Associate Director for Housing Policy at 202–508–9476 or gholder@aahsa.org.

PREPARED STATEMENT OF THE NATIONAL ASSOCIATION OF HOUSING AND REDEVELOPMENT OFFICIALS

GENERAL COMMENTS

The National Association of Housing and Redevelopment Officials (NAHRO) welcomes the opportunity to offer comments on the fiscal year 2001 budget for the Department of Housing and Urban Development (HUD). Founded in 1933, NAHRO is the nation's oldest and largest national organization representing housing and community development officials from all 50 states, Puerto Rico and the Virgin Islands. NAHRO represents more than 2,500 agencies and more than 6,500 professionals. NAHRO members participate in every national, state and/or local housing and community development program that currently exists in the country. This ranges from the community development block grant (CDBG) program to financing tax credit projects to administering the public housing and Section 8 programs to developing homeownership opportunities for low- and moderate-income families and individuals.

FISCAL YEAR 2001 PROGRAM FUNDING

HOME program

NAHRO continues to support increased funding for housing and community development programs. NAHRO urges funding the HOME program at a level of $2 billion. The HOME program is one of the few federal programs that add to the affordable housing stock in many local communities. It has proven to be a successful vehicle for this purpose, fostering partnerships and creativity at the local level, and leveraging private investment at a 2:1 ratio. The program has produced a good mix of rental units and home ownership opportunities for those of low and moderate income. The success and appeal of this program warrants an increase funding to $2 billion in fiscal year 2001.

Community development block grants (CDBG)

NAHRO supports a funding level of $5 billion for the CDBG program. The CDBG program has proven to be effective at providing resources that help local governments meet the given need of a community at the time that need must be addressed the most. It is a universally popular and appreciated program that just completed celebrating its 25th year of existence (seer attached publication). One of the major benefits of the program is that it is very effective in leveraging additional public and private investment dollars for neighborhood and community improvement. Equally important, the CDBG program is a major factor in the prevention of further decline in many low-income neighborhoods throughout the country.

A major flaw in the funding of the CDBG program in the past has been the significant number of set-asides. On average, Congress sets aside more than 10 percent of the program's funds for specific activities and/or grantees. This is a misuse of this valuable resource. Every dollar that is set aside reduces the formula allocation to entitlement communities, and reduces the opportunity of all grantees to address their specific needs. Worthy programs should be funded independently and not set aside from needed and successful programs such as CDBG. Additionally, we are concerned about the latest rule promulgated by the department, which would require all units funded by CDBG, and containing lead needed to be abated immediately. We are concerned that this endeavor is a costly one that could have unintended consequences on the program. We strongly encourage the committee to seek a delay in implementation of this initiative until the full costs can be identified and the implications to program activities are determined.

Public housing

The Quality Housing and Work Responsibility Act (QHWRA) of 1998 created more opportunities for public and assisted housing programs to be managed in a way that reflects the needs of local communities. It also included provisions designed to minimize the rent burden of public housing residents. Residents of public housing cannot live in a decent and safe environment if the managers do not have the resources that are necessary to provide the kind of services that create that kind of environment. Unlike the private sector, local housing authorities cannot rely solely on rent receipts to cover expenses but must also rely on Congress to appropriate sufficient

funds to ensure that public housing buildings are operating efficiently. Private landlords are not required to provide supportive services and programs designed to lead residents to self-sufficiency or ensure that certain needs are met. Our experience over the years have proved that the local housing agency must be the provider of housing and related services.

The Operating Fund is the vehicle that fills the gap between the rental income and the amount needed to operate the units and the programs to support the residents. To fund operations of the public housing program adequately, Congress must provide at least $3.55 billion for fiscal year 2001. Despite the fact that QHWRA permits flexible use of capital fund monies for operations, the operating fund should not be deliberately short funded based on the assumption that capital funds will be used.

The Capital Fund provides the resources to maintain the public housing physical plant. The modernization and maintenance of the 3,400 public housing units across the country require that we address the unfunded backlog of modernization needs, as well as the accruing maintenance and replacement needs of these units. NAHRO urges Congress to fund the Capital Fund at no less than $3.5 billion for fiscal year 2001.

HOPE VI is performing the dual function of eliminating obsolete public housing projects and replacing them with mixed income, attractive, neighborhood revitalizing developments. This program has made a dramatic and positive impact and should be funded at $625 million for fiscal year 2001.

The Public Housing Drug Elimination Grant Program (PHDEP) funds practical solutions to fight drug and criminal activity that threatens the safety and well being of public housing residents. Some the solutions include specialized lighting that increases security on authority properties, increased police presence, tenant patrols, organized youth activities, drug education and treatment programs, and a myriad of other valuable activities. In the past, program funds were distributed through competition but are now distributed by formula. As a result of the success of the program, NAHRO urges Congress to increase funding for this program to $410 million.

Housing certificate fund

The largest housing program is the tenant-based assistance program. QHWRA merged the voucher and certificate program into one program, a voucher program, which will allow for easier management of the program. Tenant-based assistance is one tool within the affordable housing arsenal available to local agencies to provide housing assistance to low-income households. The program provides housing choices to families by utilizing the private market, thereby creating a win-win scenario for everyone. NAHRO strongly supports an appropriation of funds that will guarantee the renewal of all vouchers and certificates set to expire in fiscal year 2001. Congress should appropriate the level of funding necessary to ensure that renewals of these certificates and vouchers occur.

In spite of the rental assistance program's success, there are two operational issues that merit attention. First, it is critical for Congress to increase the fair market rent (FMR) for vouchers from the current 40th percentile to the 45th percentile of rents. Many in Congress, HUD and OMB will raise concerns that the increase will cost the Federal government more money. The reality is that the increase will help ensure that the resources used for housing assistance will be spent for housing by those eligible to receive assistance. One criticism of the Section 8 program is that the vouchers and certificate are underutilized in some markets. Increasing the FMR provides recipients of this assistance greater housing choices to utilize the vouchers they have been given.

Secondly, Congress needs to review the QHWRA provision that limits a household to not pay more than 40 percent of monthly-adjusted income for its Initial use of the subsidy. The limit restricts recipients' choice within the rental housing market.

NAHRO recommends that the Shelter Plus Care vouchers be renewed as part of the Housing Certificate Fund. NAHRO believes this will ensure continued funding for this valuable program which ensures that housing and supportive services are provided to the homeless.

HOMELESS ASSISTANCE PROGRAMS

Homelessness continues to be a major problem across the face of America. On any given night, there are 750,000 homeless persons on the streets. The Congress must continue to fund adequately the various programs that help homeless families and individuals. Housing authorities and community development agencies play a big role in providing assistance to the homeless in their communities. Working in partnership with local service providers and nonprofit organizations, NAHRO members

are creating innovative solutions that coordinate the housing and support services needed to end homelessness.

NAHRO supports a homeless block grant for homeless programs; however, we do not support national set-asides for permanent supportive housing. Local communities are in the best position to determine how to address the needs of the homeless within their jurisdiction. Without sufficient funding, a formula block grant will not work effectively. Sufficient formula allocations, without set asides, will help to ensure that the homeless problem is addressed in a fashion consistent with local needs.

NAHRO supports an appropriation of $1.2 billion to fund programs that provide the essential continuum of care that the homeless require.

HOUSING PRODUCTION PROGRAM

The Department of Housing and Urban Development has released a study that shows that more than 5 million Americans are in the midst of an affordable housing crisis. Families are forced to pay 50 percent or more of their income for rent because the cost of housing is so high. In communities throughout the country there is a need for an increase in the production of affordable housing to satisfy a need that is not currently being met. NAHRO supports a housing production program that results in a net increase in hard units and supplements existing affordable housing programs. This production program should be available to entities dedicated to providing affordable housing. This production program should not be overly regulated and should allow for local decision making regarding the type, targeting and financing most appropriate for the site being developed and the community where is located.

The production program should include the following principles:

—There shall be one fund, not separate pots of money to various eligible local agencies.

—The funding distribution to local agencies will need to be determined (pipeline or conduit system, competition, formula).

—All partners (non-profit, private sector, etc.) may be applicants to local agencies for the production program.

—The funding is administered such that HUD is only a funding conduit for local agencies.

—This is a new production program (demonstration/trust fund?)

—That capital or internal subsidies are sufficient to serve extremely low-income families, and special market conditions.

—Capitalization of sufficient operating reserves should be provided for if needed to support project affordability.

—This proposal considers and takes advantage of private sector housing development, since that is the major source for housing development in the country.

—This proposal would permit and encourages private partnership financing by reducing the risk involved in serving extremely low-income families.

—This fund must be flexible enough to permit development of rental, rent-to-own and home ownership properties, as determined by local need.

—Provide for targeting but allow for flexibility in the actual percentages, to maximize financial feasibility and facilitate combination with other programs. The Housing Committee felt strongly that these funds should go to those at 50 percent or less of AMI.

—Permit the use of funds in the most flexible way possible, including mixing funds from a variety of sources as needed to make the units affordable and simplify program rules to match private sector delivery models.

—Identify the resource or resources needed to fund the production program ($5 billion FHA now, future production funding to be determined).

—Affordability terms should be "permanent," meaning 50 years. Additional restrictions should be developed to prevent loss of the property to the affordable housing inventory. This may include restrictions on use of pro-rated proceeds from the property, right of first refusal, and other mechanisms.

Units should be developed to fit into socially responsible environments. The program should not result in concentrations of poverty but a mixed-income, mixed-financed viable community.

LANGUAGE SEEKING IMMEDIATE RELEASE OF FUNDS FROM HUD AFTER IT HAS BEEN APPROPRIATED.

Housing and community development agencies have grown increasingly frustrated with an increasing tendency for HUD to delay issuing program funds in a timely manner. In some cases, agencies have waited more than a year for program funds

from the department. This creates a number of programmatic and administrative problems for local agencies and disrupts services to needy citizens. NAHRO supports legislative language that requires the Department to disperse or allocate program funds with 90 days of appropriations from Congress.

CLOSING

We want to thank you for the opportunity to testify. We look forward to working with the committee to ensure that adequate funding is available for these programs.

PREPARED STATEMENT OF THE SANTA MARTA HOSPITAL, LOS ANGELES, CA

Thank you Mr. Chairman for the opportunity to submit this testimony for the written record on a very important initiative underway at Santa Marta Hospital in Los Angeles California, The Diabetes Education and Management Program. This initiative has been implemented in response to one of the most critical and expensive medical crises threatening our patients. This program will provide a national model for diabetes education, outreach and disease for underserved and highly at-risk populations, specifically, Hispanic Americans.

Santa Marta Hospital's three-year multi-site, Diabetes Education & Management Program will focus on the provision of diabetes education, outreach and health care services to an extremely at-risk, underserved and economically disadvantaged Hispanic population. Approximately 40 percent of the target population for the Diabetes Education and Management Program are uninsured, and live at or below the federally defined poverty line.

This initiative will address the urgent diabetic epidemic that is affecting the Hispanic population in Santa Marta's service area, the State of California and the nation. This innovative community-based program will use specially trained residents of the community to provide educational presentations, information and outreach to the residents of the hospital's service area. These "Health Promoters" who will themselves be graduates of the Diabetes Education program, will be trained to provide screening, educational presentations, preventative services and outreach for primary medical care to residents of the neighborhood. The specific Objectives, Methods and Evaluation strategies that will be implemented as part of this initiative include:

OBJECTIVES

1. To train initially 20 (and ultimately 100 over the three year life of the demonstration) Community Health Promoters who will then provide diabetes education and medical services to at least 150 people in the East Los Angeles community annually, moving to 200 people in year three.
2. To develop 70 courses annually that will include educational presentations addressing stages of diabetes, symptoms, nutrition and treatment options, both in Spanish and English.
3. To provide low cost or no cost lab tests, medical care, and diabetes treatment to members of the East Los Angeles community.
4. To expand the scope of community outreach to include a much broader range of diabetes medical, educational and psychosocial services provided to poor people in East Los Angeles.

METHODS/STRATEGIES TO BE USED TO MEET THE PROGRAM OBJECTIVES

1. The program will be composed of both diabetes education classes and preventative and primary care medical services. The education component will focus on diabetes presentations addressing symptoms, nutrition, and treatment. Approximately 10 or 12, 12-week courses will be offered serving approximately 30 people per class (at least 200 people per year, by year three).
2. Primary care programs will include: regular medical check-ups and lab work, screenings for diabetes, referrals to specialized physicians, and referrals to psychosocial services. Lab work and medical family history will be obtained at the beginning and end of the 12-week program. Results will be compared and used as a performance evaluation tool for the Diabetes Education & Management Program.
3. Diabetes education and management courses will be taught first by trained hospital staff. Eventually, 20 community Diabetes Education & Management Program participants, diagnosed diabetics themselves, will receive 50 hours of training to become diabetes educators in order to increase the number of people providing screenings in the community. This will improve program effectiveness because this community responds positively to community based programs.

4. The community outreach program will continue to be supplemented by regular visits from Santa Marta's Mobile Health Care Delivery Van. This mobile clinic, staffed by doctors and nurses, will provide basic medical evaluations, testing, health education materials, and referrals to the Diabetes Education & Management Program.

EVALUATION STRATEGIES

1. Monthly, the project Clinical Director will review progress and present status reports to Santa Marta Hospital. The project Clinical Director's report will list the number of people benefiting from the education program, accomplishments, problems, corrective actions, and campaign status.

2. At the end of each 12-week course, participants will fill out evaluation forms assessing course effectiveness. The results will be compiled by the project Clinical Director quarterly and presented to the Hospital.

3. At the end of year one, the program will be thoroughly reviewed by the hospital President & CEO to determine program effectiveness, formulate recommendations, and make required changes to ensure its continued success. Their report will be shared with all interested parties, including donors and local health and social service agencies.

The Diabetes Education & Management Program will provide education, medical and psychosocial services to people living in East Los Angeles. The program includes: free educational classes, two free lab work visits per participant (one at the beginning of the 12-week course and one at the end to test compliance and program effectiveness), and low or no cost medical services for related health effects of diabetes.

Diabetes is known to be one of the most under identified causes of and contributions to death and that it disproportionately affects the Hispanic population. Additionally, it is widely recognized that the Hispanic population is three times more likely to have diabetes than other non-Hispanic populations. Today, there are approximately 15.7 million people or 5.9 percent of the population who have diabetes. While an estimated 10.3 million have been diagnosed, 5.4 million go undiagnosed. Hispanics represent 12 percent to 14 percent of all diabetes cases nation-wide. Additionally, it is estimated that approximately 22 percent of elderly Hispanics suffer from the diabetes. Hispanics are the second largest and fastest growing minority group in the United States. In 1993, there were 27 million Hispanics in the United States, representing 10 percent of the population. By 2050 Hispanics will constitute 21 percent of the U. S. population.

Ninety-seven percent of the population surrounding Santa Marta Hospital is Hispanic. The Hospital's census indicates that 66 percent of its patient population suffers from undiagnosed and diagnosed diabetes, and there are alarmingly high statistics for those who suffer from complications such as gangrene, kidney failure, heart disease and blindness. Of that number the Hospital estimates that it can target at least 2,440–2,840 with its Diabetes Education and Management Program.

Located within an inner-city neighborhood plagued by poverty, gang violence and drugs, Santa Marta Hospital is a sanctuary of hope for the 19,000 people who walk through its doors each year as well as the 955,000 who reside in its service area. Ninety percent of Santa Marta's patients rely on Medicare and MediCal programs to access health care services. The remainder can pay only a small portion of their hospital expenses or rely on Santa Marta's charity care. Given the poverty of its patients, the hospital depends on the partnership of corporations, foundations and individual donors to fund the cost of new medical programs and necessary major capital expenditures.

The per capita cost per diabetic admission to hospitals in California is $8,600. This does not include non-hospital-based dialysis and other medical supply costs; lost work time; or other societal effects. The cost of doing nothing is $4,472,000 (520 people × $8,600), and these costs are generally supported by Medicare and MediCal (Medicaid) reimbursement. Santa Marta's proposed program will save Medicare/MediCal programs in California alone $2,400,000.

Given the financial ability of the affected population and the high expense of diabetes, Santa Marta Hospital is seeking $2 million in fiscal year 2001 for the full implementation of this needed community based prevention, education and management initiative.

Poverty, gang violence, drug dealing, alcohol abuse, rampant teen-age pregnancy and an exceptionally high school dropout rate are just some of the harsh realities impacting the seven-mile area surrounding Santa Marta Hospital. There are over 9,000 hardcore gang members and 58 established gangs who shadow the community with a constant threat of violence. As the only Catholic Hospital in an overwhelm-

ingly Catholic population, Santa Marta provides a sense of sanctuary where patients experience safety and care with dignity.

Founded in 1924, Santa Marta Hospital was originally a ten-bed maternity hospital. Today the hospital's maternity department delivers over 1,500 newborns each year, and coordinates Comprehensive Perinatal Service Programs for the almost 1,000 poor pregnant women who walk through its doors annually. The hospital expanded in 1971, and grew into a 110-bed acute care facility offering medical services including: Radiology, Surgery, Labor and Delivery, Nuclear Medicine, Laboratory, Pharmacy, Cardiopulmonary, and Physical Therapy. In 1989, a 20,000 square foot, 24-hour Emergency Room Intensive/Coronary Care Unit (ICU/CCU) transformed the hospital into a complete comprehensive medical facility.

The hospital prides itself on offering several critical programs that impact the health of the larger community. Santa Marta is a place of hope and service in their community. They know that the hospital doors are open, and that no one is ever turned away or refused care on the basis of race, religion, gender, sexual orientation, age, national origin, disability, or ability to pay.

Enhancing its broad range of hospital services, Santa Marta coordinates the structure for Pediatric, Family Care, and Obstetrical Clinics to assist overall outpatient health care. "Health Fairs" and "Health Seminars for Seniors," reinforce the hospital's outreach to the medically indigent with an emphasis on preventative care. Additionally, the hospital coordinates a highly successful program for "at-risk" youth that has the collaboration of local area schools, social service agencies, juvenile authorities, and youth/adult employment programs. The program introduces teens to a professional environment where they can explore positive, future-oriented alternatives to the world of drugs and gang violence. Each year over 250 at-risk residents of the community work more than 9,600 hours and are exposed to positive role models, while gaining the self-esteem resulting from helping others in need.

In the fiscal year ending June 1999, Santa Marta Hospital treated over 19,000 patients and wrote off more than $11 million in fee reductions, and more than $2.1 million in charity care. The hospital also spent nearly $900,000 in community service programs. Nearly 90 percent of Santa Marta's patients are government reimbursed cases (45 percent Medicare and 45 percent Medi-Cal). And due to extreme hardship, the remainder are treated for a very low fee or at no charge.

Santa Marta understands well that patient education is critical. People with diabetes can reduce their risk for complications if they are educated about their disease, learn and practice the skills necessary to better control their blood glucose levels, and receive regular checkups from their health care team. Santa Marta Hospital encourages its patients to work with them to set goals for better control of blood glucose levels, as close to the normal range as is possible for them. Health care education is vital.

Because people with diabetes have a multi-system chronic disease, they are best monitored and managed by highly skilled health care professionals trained with the latest information on diabetes to help ensure early detection and appropriate treatment of the serious complications of the disease. Santa Marta Hospital is proposing its Diabetes Prevention and Management as a team approach to treating and monitoring this disease in an extremely at-risk population.

Hospital statistics indicate that members of the East Los Angeles community are more likely than the national average to suffer, or be at risk of suffering from diabetes. In addition to genetic predisposition, many community members are obese, have poor nutrition, and do not practice strong preventative medicine. Consequences of untreated or unmanaged diabetes include blindness, amputations, kidney failure, high blood pressure and strained work, financial and family relations. Remember, there is no cure for diabetes.

This initiative, at its core a twelve week program of diabetes screening, education, and management program, will be culturally and linguistically sensitive order to address diabetes from a prevention perspective, preserving the health and financial resources of our patients, our hospital, and governmental health care programs.

Santa Marta estimates that the program cost to test, educate, and provide initial medical treatment to program participants will be between $1,000 and $1,500, depending upon the seriousness of pre-existing diabetes-related conditions. In 1997, the average cost of health care for people with diabetes nationally was $10,071, as opposed to $2,699 for individuals without the disease.

By learning to manage their diabetes, participants of Santa Marta's Diabetes Education & Management Program can potentially eliminate days missed from work due to diabetes, costly hospitalizations, and permanent disability from blindness, amputation, or kidney-failure. Given program compliance, the cost of the educational program would be recouped in health care savings within three months.

Using 1997 health care cost data, the initiative could demonstrate $200 million savings over a twenty-five year span.

Thank you Mr. Chairman for the opportunity to submit this testimony. We look forward to working with you this year to secure $2 million in fiscal year 2001 to implement this very needed community based diabetes education and management program.

FEDERAL EMERGENCY MANAGEMENT AGENCY

PREPARED STATEMENT OF THE NATIONAL EMERGENCY MANAGEMENT ASSOCIATION

INTRODUCTION

Thank you Mr. Chairman, Ranking Member Mikulski and distinguished members of the Committee for allowing me the opportunity to provide you with testimony on the Federal Emergency Management Agency (FEMA) fiscal year 2001 budget. My name is Joe Myers and I am the Director of Florida Division of Emergency Management. I am here today representing the National Emergency Management Association (NEMA). As the current president of NEMA, I represent the state emergency management directors in the 50 states, District of Columbia and the U.S. territories who are its core members. NEMA's members are responsible to their governors for emergency preparedness, mitigation, response and recovery activities. These are also the people that you rely on to manage disasters that occur within your districts and ensure your constituents receive all the assistance they require to recover from any event that may occur. With the severe weather we've seen in recent years, I'm sure many of you have had declared disasters within your districts.

The FEMA budget provides critical support to state and local emergency management programs through actual dollars, grants, and program support. NEMA is most concerned about FEMA's stagnant request for State and local assistance funding provided through the Emergency Management Performance Grant (EMPG). EMPG funds (formerly known as SLA funds) have been virtually the only major program area where FEMA has not requested a significant increase in the past seven years.

State and local assistance funding in the EMPG consists of "pass through" grants whereby the state distributes approximately two-thirds of the federal funds to local governments to provide a foundation for basic emergency management capabilities. These pass through grants are used to support planning, training, exercises, public education and information and many other day-to-day activities designed to prevent disaster loss, enhance emergency management capabilities to handle disasters when they do occur and ultimately, to protect the public, their homes and communities in times of disaster or emergency .

Emergency management activities have expanded in recent years, due to increases in the number of weather related events and new threats such as wildfires in urban settings, Y2K preparedness, international disaster relief, school safety, airline disasters, potential public health epidemics such as the New York encephalitis case, and the new and expanded threat of domestic terrorism. FEMA Director James Lee Witt recently stated at the NEMA Mid-Year Conference that we must be prepared for new threats, realize the increasing frequency and severity of events, and recognize the future impact of climate changes. Emergency management, like most sectors of government is faced with the challenges of doing more with less and doing it all at a higher level of service to the taxpayer and our constituencies. Coupled with this, is the looming threat by Congress to reduce overall disaster costs despite the fact that we are faced with more events and more threats.

FEMA's request for level funding of $137 million for the Emergency Management Performance Grant (EMPG) would provide no means for state and local governments to increase their capacities to respond to additional threats and the charge of doing more with less.

At NEMA's 2000 Mid-Year Conference in Washington, D.C., the state directors of emergency management unanimously approved a position paper requesting an additional $10 million in EMPG funding over and above the FEMA request of $137 million for a total request of $147 million.

NEMA views these grants as a preventative measure that will likely mitigate the costs of disasters. For instance, a state grant could pay for a public education campaign on installing wind resistant shutters to survive hurricanes or building safe rooms to withstand tornadoes, effectively utilizing equipment for early warning systems and tracking weather-related events, or for training emergency management employees through drills and exercises. We are talking about saving lives with this money first and foremost, but this money also saves property and can assist in re-

ducing the federal government's cost for disasters. EMPG is the most flexible grant program that states can use to mitigate and prevent disasters. The program allows state and local governments to use the funds according to their own needs. However, no amount of flexibility can make up for shortfalls in funding. The only option in that situation is for limited dollars to be shifted from one priority to another which results in little opportunity to increase the states' overall emergency management capability.

Director Witt has proposed to NEMA that levels of disasters be created. Level one for example, would be a smaller disaster that would require federal disaster assistance through the Public Assistance and Hazard Mitigation Grant Program, but could be managed by the state with limited FEMA involvement within the state itself. The level of FEMA involvement and personnel on the ground would increase respectively with the level of disaster. This proposal would mean significant administrative cost savings to the federal government. It is an excellent chance for capable states to take on greater management responsibility for federally declared disasters. We believe we can implement programs more quickly and at less cost. But we need adequate EMPG funding to build and maintain those capabilities that would allow us to manage disasters on our own.

Ten million dollars in additional funding may sound significant, but when you consider that amount is divided among 50 states and territories it is not a lot of money. For example, a $10 million add on would mean that the State of Florida would receive approximately $320,000 beyond the level funding proposed by FEMA. Most states, including Florida, pass two-thirds of that funding down to local governments—approximately $200,000 in this case meaning that each of my counties would receive $3,000. And each county would be required to provide match funding. As you can see, NEMA's request for $10 million additional dollars is quite small when broken down by 50 states and thousands of local jurisdictions.

State and local emergency management programs cannot continue to effectively meet the growing challenges facing them today with little to no funding increases in a seven-year period. A 1998 NEMA survey revealed a $150 million shortfall in federal funding for State and local emergency management programs. In fiscal year 1997, states reported that shortfalls in SLA grants totaled more than $152 million. The 1997 shortfall is $27 million more than fiscal year 1996, and $68 million more than fiscal year 1992. Spending by the states for emergency management has dramatically increased over the last five years. According to a NEMA survey, states spent $2.77 billion on emergency preparedness, mitigation, response, and recovery in fiscal year 1997, which is nearly double the amount of the previous five years. A survey to gather current spending levels is being conducted now and we anticipate the $2.77 billion in spending by states will increase drastically. Today, emergency managers must prepare and respond to "new" threats like domestic terrorism, Y2K date-related failures, international disaster relief, and school violence. Whether it is a hurricane along the East Coast or tornadoes in the Midwest, states need a federal commitment to recognize that each state and local government has unique disaster preparedness and response needs that require flexible, predictable, and adequate funding assistance like the EMPG grants.

In fiscal year 2000, FEMA eliminated all 100 percent funding and instituted a composite 50 percent federal and 50 percent state cost share for all FEMA programs. (The composite represents the various cost shares for states participating in specific FEMA programs such as the hurricane program or the earthquake program.). FEMA's fiscal year 2001 budget assumes that all composite shares will move to a flat 50/50 for all states, which means that many states will have to increase their match funding for the second time in two years.

Funding inequities in FEMA's budget leave state and local governments holding the bag. It is beneficial to have new funding for special projects such as terrorism, but core funds that most affect the primary functions of emergency management should not be held hostage to pay for other increases. We cannot reduce or keep level the most important funding in the FEMA budget.

While we cannot prevent events and natural disasters from occurring we can be prepared for them and help our communities minimize the impact of lives lost and destruction of our critical infrastructure. I ask that you please consider NEMA's request for additional EMPG funding as you consider difficult budget decisions this year.

I'd like to take the opportunity to quickly address three other issues that may be of interest to this Committee.

DOMESTIC PREPAREDNESS

NEMA is actively engaged in the issue of domestic preparedness. In addition to testifying before various congressional committees, developing model plans and strategies and providing information resources to the states, NEMA is also partnering with the National Governors' Association and the Office of Justice Programs to hold a series of regional forums around the country to bring together governors policy advisors, emergency management, law enforcement, public health and the fire service in order to discuss critical policy and operational issues related to domestic terrorism. States are working hard to develop their capacity to respond to such an event. Much progress has been made in a short period of time, but there is still much work to be done at the federal level to enhance coordination and communication among the various federal agencies involved with domestic preparedness. It is nearly impossible at this point for states to be fully informed on what each federal agency is doing in this area, what funding is available to states and for what purpose, how federal funding can be leveraged within states to maximize resources, and the debate continues about who is really in charge when an event occurs. FEMA Director James Lee Witt recently indicated to NEMA that he wants FEMA to become more engaged and play more of a co-leadership role with the Department of Justice. NEMA is pleased to hear that FEMA intends to elevate the importance of the issue within the Agency and we look forward to working closely with them to enhance state and local capabilities in this area.

Cyber-terrorism is a related threat that needs increased focus and attention. The United States government, individual state governments and the private sector are extremely vulnerable to cyber-terrorism. We should take lessons learned and protocols established from the Y2K problem and direct them towards the cyber issue. Much work was done with regard to Y2K preparedness and we were successful in preventing major disruptions or failures. It makes sense to redirect that level of energy and focus to cyber-terrorism.

COMPETITIVE GRANTS PROGRAM FOR THE HAZARD MITIGATION GRANT PROGRAM

FEMA Director Witt also mentioned to NEMA at our Mid-Year Conference in February that Congressional appropriators are considering whether the Hazard Mitigation Grant Program (404 funds in the Stafford Act) should become a competitive grant program. As explained to NEMA, states would compete for grant funding and project proposals would be reviewed on a competitive basis and funded by a pool of funds. The pool of funds may be divided according to hazards with a certain percentage available for flood projects, hurricane projects, earthquake projects, and other projects. NEMA surveyed the states on the issue and 40 responding states strongly opposed any changes to the HMGP program that would make it a national competition. The Hazard Mitigation Grant Program, in its current form, provides a fair and objective process for providing mitigation funds to states experiencing disasters. You should know that NEMA has been working in partnership with FEMA for the past several years to streamline the 404 Program in ways that will ensure state and local mitigation needs are identified and prioritized in the state mitigation strategy before disasters strike, speed up the project application and review process, and ensure quality projects that meet federal requirements. The efficiency of the program has improved dramatically, but there is still work to be done. NEMA strongly believes that allowing all interested and capable states to have greater administration and management of the program will further streamline the process, relieve FEMA of unnecessary administrative duties and most importantly, ensure that state and local mitigation priorities are appropriately addressed.

EMERGENCY MANAGEMENT STANDARDS AND ACCREDITATION PROGRAM (EMAP)

NEMA is leading the way in developing and implementing, for the first time, a national accreditation program for state and local emergency management programs. The Emergency Management Accreditation Program (EMAP) is a voluntary program that provides national standards, advances the profession, identifies and promotes states' best practices and lessons learned from past disasters, is based on service to the nation and to individual communities, and promotes continuous self-improvement.

While NEMA is the lead organization in the development of EMAP, many other critical stakeholder organizations have pledged their support to NEMA in the effort including: National Governors' Association, The Council of State Governments, National League of Cities, National Association of Counties, FEMA, U.S. Environmental Protection Agency, U.S. Department of Transportation, International Association of Emergency Managers, International Association of Fire Chiefs and others.

The development of national emergency management standards and accreditation is well underway with an alpha test planned in late 2000 followed by a beta test with four states in 2001. Full implementation is expected in 2002. NEMA would be pleased to keep this Committee apprised of the progress being made in this area and we ask for your strong support as state and local governments continue to seek innovative ways to rise to the growing challenges of emergency management.

CLOSING

On behalf of NEMA, I would like to express my deep respect and appreciation for FEMA Director James Lee Witt and the incredible job he has done at FEMA over the past seven years. The nation's emergency management system is better for his having been the FEMA Director and our citizens are the direct beneficiaries of his commitment to disaster mitigation. He has certainly set the standard for the future. And we as states and emergency management directors need and want to institutionalize many of the changes he's made at FEMA. We need your help to do that.

Thank you for the opportunity to present testimony before this Committee. We appreciate the serious consideration that you will give to providing $10 million in additional funding for the Emergency Management Performance Grant in the FEMA budget.

NEMA stands ready to serve as a resource to you and the Committee on all emergency management related issues.

PREPARED STATEMENT OF THE ASSOCIATION OF STATE FLOODPLAIN MANAGERS, INC.

The Association of State Floodplain Managers, Inc. (ASFPM) is pleased to share comments on five specific aspects of the fiscal year 2001 budget request for the Federal Emergency Management Agency:

—Continued funding for pre-disaster mitigation partnership initiatives;
—Additional funds to support verification and modernization of flood maps;
—Augment NFIP policyholder funds to address the problem of repetitive losses; and
—Funding for the National Damage Safety Program; and
—Support request for additional staff positions.

The Association of State Floodplain Managers, Inc. and its chapters represent over 3,500 state and local officials as well as other professionals who are engaged in all aspects of floodplain management and hazard mitigation. All are concerned with reducing our Nation's flood-related losses.

Our state and local members are partners with the federal government to implement programs to reduce long-term losses from floods. This partnership is supported by the Community Assistance Program (CAP) through which the National Flood Insurance Program cost-shares state activities with assist communities. States provide technical assistance and coordination of the NFIP with local jurisdictions and property owners. The Association's state members are concerned that the funding level for this program has been held constant for six years despite increased State involvement in new initiatives designed to reduce flood losses. The funds for CAP are collected from policy holders as part of the policy surcharge of $30/policy.

PRE-DISASTER MITIGATION PARTNERSHIPS

FEMA's focus on pre-disaster mitigation partnerships, referred to as Project Impact, fosters cooperative efforts at all levels, including businesses and non-profit entities. The objective is to focus attention on what everyone—not just government—can do to prepare for and to reduce the losses associated with disasters. The National Flood Insurance Program, under which local jurisdictions regulate development activities within mapped flood hazard areas, is a fundamental pre-disaster mitigation program that requires compliance with minimum standards in order to reduce long-term exposure to flood damage.

—ASFPM supports the Administration's request for $30 million to continue expansion of the pre-disaster mitigation work.

FLOOD MAP FUNDING AND NEEDS

Flood maps serve many purposes beyond the immediate needs of the National Flood Insurance Program, and good maps have a direct bearing on the magnitude and costs of flood events. FEMA estimates that local regulation of flood hazard areas, predicated on the flood maps, avoids property losses of over $700 million, which are savings that accrue to property owners and taxpayers. More difficult to count are the benefits associated with using the maps to guide development to less

hazard-prone areas. Flood maps yield benefits at all levels of government, including reducing the needs for federal disaster assistance when people build elsewhere or build to minimize damage.

ASFPM appreciates FEMA's extensive efforts to develop a mechanism to add funds to the mapping budget. However, the most equitable method is to recognize the full benefits of good maps by adding general funds. Prior to 1988, the maps were funded by general funds; since then, the costs have been borne almost entirely by fewer than 4 million policyholders.

—AFPM endorses the Administration's request to augment the existing budget with funds from the Disaster Relief Fund for the specific purpose of verifying and updating maps in communities where flooding has occurred. Not only will this approach result in better maps, but it will lead to better decisions during the rebuilding phase of recovery.

—ASFPM respectfully requests consideration of adding general funds to support FEMA's map modernization initiative. Flood maps are used to develop evacuation plans, to manage growth, to design resistant public works, and to plan parks and greenways. Because of the broad benefits of good flood maps, it is appropriate to add general funds to FEMA's budget for mapping.

REPETITIVE LOSS INITIATIVE

The National Flood Insurance Program is self-supporting. Because the NFIP cannot build large reserves for the catastrophic loss years in the same manner that private insurance companies do, it does exercise the Treasury borrowing authority when losses exceed the anticipate average annual losses. And because borrowing is paid back from income received from just over 4 million policyholders, and because those same policyholders provide the funding to staff, manage, and administer the NFIP in addition to pay claims, the NFIP is not taxpayer supported. There is substantial evidence that the NFIP has reduced the burden of flood losses on the general taxpayer.

When the NFIP is faced with rising costs, it typically takes a simple course of action: it raises the rates and everybody who buys a policy is impacted. What the NFIP does not have is a ready mechanism to contain costs. Because the nature and frequency of flooding can't be changed, other avenues of containing costs to achieve fiscal soundness must be made available to FEMA.

To efficiently contain costs, the NFIP requires a well-funded initiative to offer financial assistance to communities and property owners to implement mitigation of properties that have received multiple flood insurance claims. Although focused on properties that have received multiple flood insurance claim payments, the benefits of this initiative will also accrue to the federal government to communities and to individual property owners.

Mitigation measures to be implemented under a Repetitive Loss Initiative must not be limited to "buyouts" as suggested in the budget narrative, but must include the full range of feasible and cost effective measures, including buyouts, elevation-in-place, retrofit floodproofing, and relocation. An effective cost-containment initiative will target only those properties that have received multiple claims that appear to be in excess of building value, and then only if it is determined that there is a cost-effective and feasible mitigation measure.

—ASFPM supports the Administration's budget request for a Repetitive Loss Initiative, which includes a starting investment of $50 million from the Disaster Relief Fund, with the clarification that the funds are to be used to support mitigation measures that are cost effective, technically feasible, and appropriate to the location (i.e., not solely for buyouts).

NATIONAL DAM SAFETY PROGRAM

The National Dam Safety Program provides funding to states to inspect dams, to train staff, and to otherwise supplement state programs. It is an investment in public safety and an investment that reduces future disasters and disaster assistance. A good inspection program leads to better dam maintenance which in turn reduces the probability of damage or dam failure.

—ASFPM supports the Administration's request for $5.9 million for dam safety.

ADDITIONAL STAFF POSITIONS.

FEMA is a small agency with a large mission. When staff resources are taxed, especially when multiple disasters draw staff away from their normal office locations, support for States and local jurisdictions is diminished. The growth in program support needed to implement mitigation programs in both the pre-disaster and

post-disaster periods is welcomed. But without additional staff, basic functions may suffer.

—ASFPM supports the Administration's request for additional positions and funds for staff.

For information about ASFPM (www.floods.org) and this testimony, contact Larry Larson, Executive Director, at (608) 274–0123, larry@flood.org

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PREPARED STATEMENT OF THE UNITED NEGRO COLLEGE FUND (UNCF)

Mr. Chairman and Members of the Subcommittee. My name is William H. Gray, III and I am President and Chief Executive Officer of the United Negro College Fund (UNCF). I thank you for the opportunity to bring UNCF's fiscal year 2001 recommendations for higher education programs at several departments and agencies before you.

UNCF is America's oldest and most successful black higher education assistance organization, representing 39 private, four-year historically black colleges and universities with either independent or religious affiliations. UNCF has been committed to increasing and improving access to college for African Americans since 1944. The organization remains steadfast in its commitment to enroll, nurture, and graduate students who often do not have the social and educational advantages of other college bound populations.

Since its inception, the fundamental mission of UNCF has been to raise critical operating funds for member institutions and their students, faculty, and staff. Mr. Chairman, I am proud to say that over the years, this mission has broadened to include over 450 successful scholarship programs, internships, research and study abroad opportunities for all historically black colleges and universities (HBCUs), Hispanic-serving institutions (HSIs), Tribally-controlled Colleges, and majority institutions. We also provide technical assistance to our trustee programs such as the fiscal and strategic technical assistance program (FASTAP) and faculty training, for institutions both domestic and abroad.

UNCF is committed to educating tomorrow's workforce. America's markets are growing more diverse, and demographic trends indicate that early in the 21st Century, African Americans and other racial and ethnic minority groups will constitute a major part of the workforce.

The more than 55,000 students enrolled at UNCF institutions are from diverse backgrounds. Our schools mirror the mosaic that is America; we are African American, White, Hispanic, Asian, and Native American. While our student body consists of varied economic backgrounds, approximately 34 percent of all UNCF students come from families with incomes below $25,000 (compared with 17 percent of students attending four years colleges nationwide). Approximately 90 percent of UNCF students require some form of financial assistance. Forty percent are the first in their families to attend college.

In spite of these challenges, UNCF students and members institutions have accomplished much. They are noted for their consistent standards of excellence and outstanding achievements. HBCUs are the major source of African American college graduates and black professionals in America. In fact, 16 Members of Congress can be counted as alumni of HBCUs. HBCUs contribute significantly to the production of African American baccalaureate degree holders in the sciences. HBCUs also graduate the most African American doctoral degree recipients. In addition, more than 50 percent of the nation's African American public school teachers and 70 percent of African American dentists and physicians earned degrees at HBCUs. These are but some of the extraordinary roles HBCUs have played in educating minority Americans.

Despite these remarkable contributions to preparing blacks and other minorities for professional careers—especially the noteworthy production of scientists, mathematicians and engineers—HBCUs receive negligible levels of federal assistance from federally supported science, mathematics, engineering, and technology (SMET) programs. Initiatives that encourage and nurture the professional development of students in these fields, while demonstrably successful, receive limited funding and have not grown in any meaningful way in the last decade. Many of these efforts are small so that the lack of fiscal and other support impedes their ability to expand and succeed.

Similarly, HBCU institutions have inadequate amounts of science and engineering research space compared to other research-performing institutions. Existing research space in many instances requires either major renovation or replacement. These deficits limit the opportunities for faculty to conduct cutting-edge research and remain competitive within their respective disciplines. Lack of adequate support

and a national commitment supporting these institutions threatens the viability of HBCUs as the leading producer of African American scientists. Furthermore, the nation is jeopardizing a longstanding and evermore essential pipeline of science, mathematics, engineering, and technology professionals.

Mr. Chairman and Members of the Subcommittee, the impressive achievements that I noted earlier have an even greater significance at UNCF institutions in that all but three of our member institutions are baccalaureate degree-granting institutions. Unfortunately, the majority of federal dollars allocated to these areas are targeted to majority research-performing institutions. Consequently, our schools are hampered early on in their ability to qualify and compete for funds—even though we contribute so much.

This is borne out by the following facts—thirteen or one-third of UNCF member institutions had active NSF awards that were ongoing or began in fiscal year 1999. While this figure seems fairly positive in terms of overall participation, when you look closely at the actual award levels for individual institutions, the grants are often very small, given that they are multiple year awards. There are one or two UNCF schools that fare better in the NSF awards process but again these institutions are the few that grant terminal degrees. The situation is similar at NASA, where in fiscal year 1999, awards to HBCUs by that agency totaled only 7 percent of the total awards to all institutions of higher education—a figure of $52 million compared to $772.6 million.

For these reasons, UNCF strongly recommends that programs at NSF and NASA, targeting broadened participation for underrepresented minority SMET students and making resources available to upgrade the research and education capabilities of HBCUs, be increased dramatically. This includes the Louis Stokes Alliance for Minority Participation program ($31 million); the HBCU Undergraduate Program ($20 million), the Alliance for Graduate Education ($17.5 million); and the Centers for Excellence in Science and Technology (CREST) Program at NSF ($10 million). At NASA, we support increased funding for the Minority University Research and Education Program ($82 million). All of these initiatives have remained level funded for the most part over the last five years. While we have specified these particular programs, we hope that the subcommittee would focus throughout these agencies to identify other avenues for expanding opportunities for collaborations with HBCUs to participate in the federal SMET enterprise.

UNCF member institutions also benefit from programs at the Department of Housing and Urban Development, specifically the HBCU Community Development Grant program administered by the Office of Community Planning and Development. Because of our historic mission, UNCF schools are geographically located in some of the most underserved and economically disadvantaged neighborhoods. Our campuses, in fact, may be the greatest assets in the area. As such, by tapping into our skills, programs like the HBCU Community Development Grant allow institutions of higher education to work in partnership with our neighbors and local entities to revitalize neighborhoods near our campuses.

Take for example the program at Oakwood College in Huntsville, Alabama, which Dr. Delbert Baker, president, testified about before the House VA–HUD and Independent Agencies Appropriations Subcommittee. The fiscal year 2000 grant from HUD allows Oakwood to assist in the elimination of blighted homes in target areas in two communities surrounding the school. In addition to rehabilitating substandard owner-occupied homes in partnership with a local community development corporation, the college is expanding adult education opportunities by creating a second center for adult learning, and continuing and expanding an after school tutorial program for school aged children in the target area. Oakwood's community development grant is just one such example of how HBCUs play an essential role in revitalization of distressed neighborhoods near our campuses.

The relationship between UNCF/HBCU institutions and their surrounding communities has long been a prototype for developing stronger communities and bettering lives for residents. We have been able to facilitate collaborations and spin-offs with other institutions and agencies because of these federal funds—all to the benefit of the community. While some of our schools have been fortunate to receive funding in this and previous fiscal years, many others have not benefited, due to insufficient funding. In fact, this program has received level funding for the past two years; in its ten-year history it has increased from $4.5 million in fiscal year 1991 to $10 million this year, after remaining stagnant for most of those years. With many HBCUs located in HUD empowerment or enterprise zones, imagine how much more could be done if funding was increased by $2 million to $12 million as UNCF is recommending to award more than the current 20 grants! We urge the committee to increase the fiscal year 2001 funding for this initiative.

Mr. Chairman, it is clear that UNCF member institutions leverage federal dollars to the maximum potential. Even though we have smaller endowments and a greater percentage of students needing financial aid, UNCF institutions capitalize on our federal partnerships in extraordinary ways to address national concerns. Currently, like the rest of the nation, UNCF is facing the digital divide challenge, a problem that is greater in higher education than it is among the nation's households. All of the programs I have mentioned today help us address this challenge—even the HUD program at Oakwood which teaches computer literacy. For this reason, it is imperative that Congress show leadership by funding those proven programs that are designed to not only increase access and opportunity for African American students and the HBCUs they attend, but also those programs that have demonstrated a capacity to have considerable impact on this nation's future.

Mr. Chairman, on behalf of the United Negro College Fund member institutions, I thank you for the opportunity to share these recommendations and look forward to working with you to ensure strong alliances between our schools and the Federal Government.

NATIONAL SCIENCE FOUNDATION

PREPARED STATEMENT OF THE NATIONAL CORN GROWERS ASSOCIATION

The National Corn Growers Association (NCGA), representing 30,000 corn growers in 48 states, appreciates the opportunity to discuss the importance of the National Science Foundation's Plant Genome Initiative. We are deeply indebted to the Chairman and the members of this Subcommittee for the leadership and vision that you have shown in championing the NSF Plant Genome Initiative.

We, strongly, urge you to provide not less than $80 million for the NSF Plant Genome Initiative (PGI) and $25.5 million for the "2010 Project", the functional genomics project for Arabidopsis thaliana.

While many Federal programs are important to the nation's corn growers, we believe that the Plant Genome Initiative is the single most important appropriations issue for agriculture. As you know, funding for plant genomics has been the number one appropriations issue for the NCGA since 1996. In February of this year, the Corn Congress, comprised of growers from all over the country, reaffirmed this position.

We believe that the future of the corn industry is written in corn's genetic code and that plant genomics will give us the fundamental information necessary to revolutionize American agriculture. Plant genomic research offers us the greatest potential to increase the value and demand for U.S. corn, thereby increasing grower income and reducing grower reliance on Federal farm programs.

The Plant Genome Initiative (PGI) supports research that furthers our understanding of the structure, organization, and function of plant genomes, and accelerates utilization of new knowledge and innovative technologies toward a more complete understanding of basic biological processes in plants. This initiative will help scientists, geneticists, and plant breeders identify and use genes (from corn and other plants) that control important traits, such as nutritional value, stress tolerance, and resistance to pests.

Advances in basic plant science that result from a vigorous plant genomics program will allow us to create new hybrids and varieties that will

—Improve human and animal health;
—Reduce medical costs due to more nutritious, healthier, food for individuals;
—Reduce worldwide malnutrition through higher yielding and more nutritious crops;
—Reduce environmental problems for crop and livestock growers;
—Expand plant-based renewable resources for raw materials, industrial feedstocks, chemicals, and energy; and
—Enable growers to get more income from the market, thereby reducing grower reliance on Federal farm programs.

Already, plant research has been revolutionized and the plant research community has been rejuvenated by the PGI, even though it has been in existence for only a couple of years. The results from funded research are contributing to advances in biology beyond the world of plants, to biomedical research. One group of PGI awardees made an important scientific discovery about fundamental chromosomal organization and function.

The sequencing of Arabidopsis thaliana will be completed before the end of this year, four years ahead of schedule due to the PGI. Once the sequencing is completed, a solid foundation will be available for the "2010 Project", the new system-

atic project to determine the functions of all the genes in Arabidopsis thaliana. The NCGA supports work in Arabidopsis thaliana as it will facilitate efforts to locate, and understand the function of, genes in all plants, including maize.

The PGI has helped, also, to ensure that all public and private scientists and plant breeders have access to basic genetic information about plants. Approximately 450,000 Expressed Sequence Tags (ESTs) have been deposited into the public EST database for corn, tomato, soybean, and cotton by PGI projects. The projects have created massive plant genomics databases, tools, and resources that are available to the scientific community at large.

A major breakthrough in plant genomics occurred on April 4, 2000, when Monsanto announced that it had completed a "working draft" sequence of rice and that it would make the entire sequence available to the International Rice Genome Sequencing Project. As you know, with funding provided in the first year of the PGI, the NSF was directed to participate in the International rice sequencing effort. By providing significant funding for plant genomics research, the PGI spurred the rice effort. Without the PGI and the International rice effort, there would be no opportunity for public-private collaboration in plant genomics.

The NCGA applauds the action of Monsanto to ensure that fundamental, genetic information about rice will be in the public domain and will be accessible to all scientists. The "working draft" of rice provides a good base for significant advances in plant genomics research for all plants. The PGI, funded at a robust level, will encourage other public-private collaborations and increase the amount of fundamental genomic information in the public domain.

While much has been accomplished by the NSF Plant Genome Initiative, much more remains to be done in the next few years. In a recently published report, the Interagency Working Group on Plant Genomes (IWG), estimated that $500 million, over three years (fiscal year 2000–2002) was needed for the National PGI. Funding must be increased substantially to meet this minimum need.

We support the Administration's request for $25.5 million in funding for the "2010 Project" and the request for increased funding for Biocomplexity in the Environment. While the "2010 Project" may be considered a plant genome project, we believe that it is critical to increase funding for the base plant genome initiative, the PGI that is targeted to economically significant crops, such as corn.

The NCGA was extremely disappointed that the Administration's budget proposed keeping the core plant genomics program, the NSF PGI, at the fiscal year 2000 level of $60 million. It is unfortunate that the Administration failed to follow the recommendations of its own Interagency Working Group and request funding for the NSF Plant Genome Initiative at a level that would allow us to achieve the IWG's $500 million funding goal. We believe that a minimum of $80 million for the PGI in fiscal year 2001 is necessary for us to begin to address the research needs for plant genomics.

The PGI is, critically, important to the nation's growers and consumers. While world population continues to expand and protein demand increases exponentially, there is an expectation of higher quality, safer, and more nutritious food. These accelerating demand pressures mean that existing resources of land, water, and nutrients must be used more effectively if the supply of food, feed, and fiber is to remain in balance with world needs. Plant genomics holds the key to our ability to meet these demands.

We, strongly, urge you to provide, at least, $80 million for the NSF Plant Genome Initiative and $25.5 million for the "2010 Project". Funding for plant genomics is, truly, the most important appropriations issue for our nation's corn growers. Thank you for the opportunity to present our views.

PREPARED STATEMENT OF THE AMERICAN CHEMICAL SOCIETY

FEDERAL RESEARCH AND THE BUDGET SURPLUS

No investment the government makes generates a higher rate of return for the economy than research and development (R&D). In fact, economic experts maintain that today's unprecedented economic growth would not have been realized but for the substantial research investments by the public and private sectors over the past few decades. Looking ahead, the American Chemical Society (ACS) is concerned that constant dollar declines in federal support for basic research over the past decade, particularly in the physical sciences, have weakened the roots of innovation in all fields and put future economic growth at risk. In order to sustain our technological leadership and living standards, increased funding for basic research should be a top priority for use of the non-Social Security budget surpluses. As a framework for

increasing R&D funding, ACS supports doubling federal spending on research within a decade, as well as balanced funding among different areas of science.

NSF BUDGET RECOMMENDATIONS

ACS strongly supports the fiscal year 2001 budget request of $4.6 billion for the National Science Foundation (NSF), which would be a 17 percent ($675 million) increase over last year's appropriation. As the lead source of federal funding for basic research at colleges and universities (excluding medical research), NSF supports research and education programs that are crucial to technological advances in the private sector and for training the next generation of scientists and engineers. The requested funding would allow NSF to increase its impact on science and mathematics education, more fully meet the enormous opportunities in core disciplinary research areas, and enhance multidisciplinary research in areas identified as national needs (e.g. nanotechnology and biocomplexity research).

CORE DISCIPLINARY RESEARCH

ACS strongly supports the 19-percent increase requested for NSF research activities and wholeheartedly endorses the administration's proposal to dedicate most of the increase to core research. In fact, a strong increase for NSF should form the basis of a bipartisan effort to revitalize the critical federal investment in basic research that extends the frontiers of science. Although long-term research in the core science disciplines has been the mainstay of our research enterprise for decades, higher profile, initiative-based R&D has overshadowed its importance in recent years. Unless basic knowledge in chemistry, physics, mathematics and other core areas—the roots of technological innovation—is advanced, complex multidisciplinary R&D in areas like information technology and biocomplexity will suffer. As the only agency charged with maintaining progress in science and engineering across all disciplines, NSF is in the best position to invigorate this critical research.

FOCUSED INITIATIVES

Nanoscale Science and Engineering.—The Society believes that the $216 million NSF has requested for nanoscale science and engineering is an important and timely investment. Nanotechnology is a cutting-edge field that holds enormous potential for improving the understanding and control of individual atoms and molecules. This interdisciplinary research, which involves some of the most modem chemistry being conducted at universities and national laboratories, could make possible the building of devices that are incomprehensibly small—on the scale of human cells, which could revolutionize areas ranging from manufacturing and advanced materials to medicine and the environment. NSF research will support biosystems at the nanoscale, novel phenomena and quantum control, and nanoscale processes in the environment. Emphasis should be placed on long-term research in this multiagency initiative and strong coordination among NSF, which plays the lead federal role, and other agencies should be encouraged.

Biocomplexity in the Environment.—ACS applauds NSF's growing commitment to developing sound science for the environment as recommended by the National Science Board. The $136 million requested for the Biocomplexity in the Environment initiative represents an investment on a scale that can effectively begin to meet the needs in this area. Understanding the powerful interactions that occur within complex biological systems and between these systems and the Earth's environment will lead to a better understanding of natural processes and the effects of human behavior on the natural world. The Society is concerned, however, that too narrow a focus has been given thus far to the truly interdisciplinary challenge envisioned by NSF in this area. In addition to the clear contributions of the geological and biological sciences, ACS recommends that the focus of the program be expanded to fully capture the potential contributions of the physical sciences for identifying and crafting solutions to environmental challenges.

GRANT SIZE AND DURATION

NSF traditionally receives high marks for efficiency—less than 4 percent of the agency's budget is spent on administration and management. Also, NSF awards funds to researchers only after a rigorous merit-review process using expert peers. While NSF funds 20,000 awards each year, it is forced to turn away twice as many, including thousands from first-rate but less established scientists and engineers. Not only will increased funding allow NSF to fund more outstanding proposals, it will allow NSF to increase the size and duration of its grants—a longstanding goal of the Foundation—without limiting the number of new awards.

For 50 years, NSF's balanced research portfolio has improved our economy, environment, and way of life. The Foundation's quality investments in research have spawned advances such as lasers, environmental technologies, polymers, and Doppler radar, as well as entire new industries such as biotechnology and the Internet. NSF is an investment in the true sense of the word.

PREPARED STATEMENT OF NEW YORK UNIVERSITY

On behalf of New York University, I appreciate the opportunity to speak in support of public investment in basic research and, in particular, in support of the National Science Foundation, the only Federal agency whose primary mission is the support of fundamental research.

NSF this year marks its fiftieth anniversary—an opportune time to assess the contribution of university-based research to the national welfare and to prepare for the scientific and technological challenges ahead. In that regard, I applaud the 17.3 percent increase in NSF's budget (to $4.57 billion in fiscal year 2001) proposed by the President and urge Congress and this Committee to support an increase of at least that amount.

At New York University, NSF funding has supported leading-edge research across a range of areas from quantum dynamics to molecular evolution to developmental genetics to theoretical particle physics. I would like today to underscore one area of research that NSF has indicated will be a priority in the coming decade and one in which NYU is well-positioned to make major contributions, biomedical genomics.

ADVANCES IN GENOMICS

The genome is the recipe or blueprint for life. During the last decade, the unraveling of the genetic code has opened up a vast range of new opportunities for evolutionary and developmental biologists, neurobiologists and chemists to understand what genes are, what they do, and how they do it. Genomics is revolutionizing biology and is dramatically changing the way we characterize and address biological questions. As a field which straddles biology, chemistry, and mathematics, genomics is growing extraordinarily rapidly and transforming these disciplines, as well as the social and behavioral sciences.

In its first stage, the revolution in genomics was characterized by a period of intensive development of techniques to analyze DNA, first in simple models, like yeast, bacteria, the worm, and the fruitfly, then in the mouse, and now in humans. The structure and function of genes are similar in these models, making comparisons useful. The second phase was characterized by the use of these tools to address whatever biological question was most easily approached, given the state of technique development. It may be described as structural genomics—which comprises the mapping and sequencing of genomes and is mainly driven by technology. The scientific community is now poised to enter the third phase of the genomics revolution, in which investigators already established in other fields (immunology, genetics, neurobiology, etc.) pursue investigations that are driven by hypothesis rather than technique. The third phase is generally termed functional genomics and uses the map and sequence information already collected or to be collected to infer the function of genes. Functional genomics integrates basic and clinical science, with the ultimate goal of exploiting genomics approaches to address the relationship between the genes identified in model organisms and those responsible for human disease states.

At New York University, we think that it is especially important to develop the field of comparative functional genomics. This comparative approach looks for the occurrence of the same genes in different species that share certain structures or functions, and provides a powerful method for understanding the function of particular genes. Comparative functional genomics uses two primary modes of analysis: (1) identifying what has been conserved over long evolutionary distances, and (2) determining crucial differences that distinguish two closely related species. This focus has particular relevance to molecular medicine as it provides the key to understanding the genetic basis of disease states that are dependent on numerous genes, and unraveling the complex regulatory networks for crucial biological functions.

STRENGTHS AT NEW YORK UNIVERSITY

Studies in comparative functional genomics necessarily synergize medically related research programs, such as those at the NYU School of Medicine and its affiliated Mount Sinai School of Medicine, with basic science research programs such as those at NYU's Faculty of Arts and Science, and computational investigators, such

as those at NYU's Courant Institute of Mathematical Sciences who are actively engaged in bioinformatics research.

In the basic sciences, NYU has substantial strengths in areas important to genomics, including evolutionary biology, developmental biology, and neurobiology, and extends this expertise through active collaboration with premier metropolitan area institutions, including the New York Botanical Garden and the American Museum of Natural History. NYU Medical School has outstanding programs in Developmental Genetics, Molecular Neurobiology, Pathogenesis and Structural Biology. And Mount Sinai Medical School has an internationally acclaimed program in Human Genetics and has begun to use genomics approaches to identify the origins of human genetic disorders.

New York University and other major research institutions are thus poised to make a distinctive contribution to the next phase of genomics research. NYU has established frameworks for interdisciplinary and interschool collaboration, strengths in biological, neurobiological, and computational sciences, and standing in the international scientific community. The nation's largest private university, with 13 schools and over 49,000 students, NYU is a leading center of scholarship, teaching and research. It is one of 29 private institutions constituting the distinguished Association of American Universities, and is consistently among the top U.S. universities in funds received from foundations and federal sources.

NYU encompasses a pre-eminent faculty and generates substantial external funding from federal and state agencies as well as the private sector. These investigations have attracted millions of federal dollars from the NIH, NSF, ONR, and EPA. In addition, NYU has received major funding from the most prestigious private foundations supporting the sciences, including the Howard Hughes Medical Institute, the W. M. Keck Foundation, the Alfred M. Sloan Foundation, and the Beatrice and Samuel A. Seaver Foundation. Faculty hmembers ave, as individuals, won prestigious awards, including HHMI Investigator, NSF Presidential Faculty Fellow, NIH Merit Awardee, McKnight Foundation Scholar in Neuroscience, and MacArthur "Genius" Fellow.

RESEARCH APPLICATIONS AND NATIONAL BENEFITS

Concentrated studies in comparative functional genomics can be a major resource for the research and development activities of academic organizations and commercial firms; can provide a strong framework for direct and indirect economic development in vital, high-tech industries; and can offer benefits to our citizens from improved health care, and technology development.

Economic development

Commercial applications that strengthen existing industries and attract new ones.—In a familiar dynamic of university-centered economic growth, industry draws on the faculty's entrepreneurial energies, their expertise in training the personnel needed to staff high-technology firms, and the fundamental scientific research that can translate into practical applications. High-tech firms spring up near a research university and, in turn, attract or spin off additional high-tech firms in the same or related fields. The interaction of scientists across firms makes the spread of information quicker and the development of projects more rapid. Initial firms and newer firms share a growing pool of highly trained personnel. The expansion of the skilled labor pool makes hiring easier; the existence of the pool attracts still more firms. Once a core of high-tech industries locates in an area, venture capitalists identify that area as promising. The flow of capital—a key ingredient for high-technology growth—increases. Once the process of agglomeration begins, it can be expected to grow on itself and become self-reinforcing.

R & D investment in genomics is already energizing bio-technology, pharmaceutical, biomedicine, agbiotech, computer software, and engineering enterprises. We expect that as the research base expands, we will see a generation of new commercializable technologies, some of which may lead to genome and pharmacological genome companies.

Job growth as a spin-off from research and development funding for genomics.—Academic R&D, although itself not directed towards specific commercial application, does provide the focus for attracting industry and serving as a base for commercial spin-offs, as has been so successfully demonstrated in the San Francisco Bay and Boston areas. A conservative approximation that uses state employment multipliers maintained by the U. S. Commerce Department's Bureau of Economic Analysis points to immediate employment impacts of academic R&D. The BEA calculates

that each $1 million in R&D grants supports roughly 34.5 full and part time jobs[1] directly within the university and indirectly outside the university as the university's expenditures ripple through the local and state economy.

Applications for environment issues

Improved understanding of the human genome is a basic link in the chain leading from scientific discovery to a better understanding of human health to effective regulatory and management actions in the realm of environmental protection. Research into genetic development and function can help to explain how environmental factors alter or influence these processes.

Advances in biomedical and other research fields

Genomics is a field which is particularly fertile in that the understanding of the detailed structure of the human genome is central to a variety of applications: cell biology, embryology, developmental biology, study of cancers and many other heritable diseases, immunology, endocrinology, neurology, and population genetics. Further, genomics techniques can address many research problems that overlap with computer vision, robotics, and combinatorial problems; genomics propels cross—disciplinary approaches for merging the biological sciences with new technologies in informatics. In addition, it is enabling researchers in developmental biology and molecular genetics to investigate genetic diversity, evolution, and development. Indeed, genomics brings together laboratory scientists with formerly unrelated disciplines, and can stimulate expansion in key directions in informatics, genetics, physical chemistry, evolutionary studies, diagnostic tools, and machine vision. Investment in facilities where computer scientists, physical chemists, and geneticists can readily interact with each other is essential for the development of this field.

Biomedical applications for national health needs

An investment in genomics research will have a heavy payoff in the nation's well-being—economic and otherwise—by advancing the frontiers of knowledge, finding new cures and treatments for diseases, and helping to develop new diagnostic technologies. Clinical applications hold enormous promise to revolutionize medicine and our understanding of both normal development and disease. Genomics research may lead to lifesaving instruments or procedures for diagnosis, prevention, and cure of diseases and disorders such as diabetes, heart disease, cancer and infectious disease. In particular, genomics science has the potential to revolutionize the development of mass screening tests for genetic disorders, ultimately making it possible to identify the hereditary contribution to common diseases, predict individual responses to drug intervention, and design drugs that are customized for individual use.

Investment in genomic science is a strategic and efficient vehicle for advancing fundamental studies in a wide variety of scientific fields, facilitating biomedical applications that can greatly enhance the public welfare; and energizing existing and new industries. The commitment of this committee to support the National Science Foundation and its genomic initiative is greatly appreciated.

PREPARED STATEMENT OF THE AMERICAN PSYCHOLOGICAL SOCIETY

Mr. Chairman, Members of the Committee: Thank you for this opportunity to present the views of the American Psychological Society (APS) on the fiscal year 2001 appropriations of the National Science Foundation (NSF). I am Alan Kraut, Executive Director of APS. We are a 15,000-member organization of scientists and academics located primarily in universities and colleges across the country. Many members of the American Psychological Society have been supported by NSF, and much basic research in our field simply could not exist without NSF funding.

I want to begin by briefly describing the focus of basic research in psychological science. We know that human potential is a resource; understanding the human mind and behavior is crucial to maximizing human potential. In order to do that, we need to know in scientific terms how people interact with each other and with their environment—how we learn, remember, and express ourselves as individuals and in groups. We need to know the factors that influence and modify these behaviors. APS members include scientists who conduct basic research in brain-based

[1] The multiplier is for 1995 and is based on 1987 benchmark input-output accounts for the U.S. economy and 1994 regional data, adjusted for 1995 inflation. See the latest (March 1997) edition of the BEA publication Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS II). These multipliers are frequently used in studies of the economic impacts of individual universities and colleges.

processes such as learning and memory, and the mechanisms of visual and audio perception. Others study decision making and judgement; mathematical reasoning; language development; the developmental origins of behavior; and the impact of individual, environmental and social factors on behavior. This basic psychological research conducted by APS members has implications for a wide range of applications, from the design of airplane cockpit control panels, to how to teach math to children; to how humans can learn using technology; to the development of more effective hearing aids; to increasing workforce productivity; and to the amelioration of social problems such as prejudice or violence.

In its budget request to you this year, NSF cited the achievements of two of APS's most distinguished members, psychologists William K. Estes and Roger N. Shepard, both of whom recently have won the National Medal of Honor, and both of whom have been longtime NSF grantees. In fact, a psychologist has been awarded our nation's highest scientific honor almost every year that it has been given. In highlighting the work of these two individuals—Estes for his fundamental theories of learning and mathematical modeling, and Shepard for his research into the nature of human mental processes—NSF is paying tribute to the entire field that these two individuals exemplify.

Let me summarize our recommendations and requests for the fiscal year 2001 appropriations for the National Science Foundation.

The American Psychological Society strongly urges the committee to:

—Appropriate the $4.572 billion requested for the National Science Foundation in fiscal year 2001 and endorsed by the Coalition for National Science Funding.

—Continue the Committee's history of support for behavioral and social science research at NSF by fully funding the requested $29 million increase for NSF's Social, Behavioral, and Economic Sciences Directorate in fiscal year 2001.

—Preserve the $13.9 million increase requested for Behavioral and Cognitive Sciences Division.

—Encourage the development of a small grants mechanism at NSF to support young investigators in the behavioral and social sciences.

—Support NSF's efforts to increase the length and duration of NSF grants, and ensure that this policy is extended to all areas of science equally.

—Encourage NSF's efforts to increase public awareness of science, and urge NSF to incorporate behavioral and social science in those efforts.

In the remainder of my testimony, I will discuss these recommendations in greater detail.

As a member of the Coalition for National Science Funding, we join our scientific colleagues in recommending full funding of the fiscal year 2001 budget request of $4.572 billion for NSF. This year marks the 50th anniversary of the National Science Foundation. During that time, as the nation's premiere basic science agency, NSF produced the fundamental knowledge and discoveries that have fueled much of the scientific and technological advances of recent years and that has been partially responsible for the economic boon we are now in. In addition, NSF plays a crucial role in maintaining the human capital and scientific infrastructure necessary to ensure the continued productivity of our scientific enterprise. In the past several years, NSF's budget has been relatively flat, particularly compared to increases seen in other federal science programs. The increase proposed for fiscal year 2001 is a sizable first step in offsetting that relative neglect.

The importance of basic science has been underscored by your colleagues in the House. It started with the House Budget Committee, which approved a significant increase in the general science budget category along with a very strongly worded statement in support of NSF. Citing NSF's central role in the nation's scientific and technological advances, and noting that basic research is a particular responsibility of the federal government, the committee (and later the full House) expressed a strong "Sense of the Congress" commitment to NSF:

It is the sense of the Congress that the function 250 (Basic Science) levels assume an amount of funding which ensures that the National Science Foundation is a priority in the resolution; recognizing the National Science Foundation's critical role in funding basic research, which leads to the innovations that assure the Nation's economic future, and in cultivating America's intellectual infrastructure. [H. Con. Res. 290.RFS Sec. 23]

This statement was retained in the bill passed by the full House and referred to the Senate in late March, plus the final bill increased the committee mark for the Function 250 category by $500 million expressly for basic research (bringing the total for that category to $20.3 billion, $1 billion over the previous year). Even within the constraints of the budget process, the House has demonstrated a clear appreciation of the importance of increasing basic science. We believe this appreciation

is shared by the Senate, and we urge the Committee to implement this commitment in the fiscal year 2001 appropriations for NSF.

Turning now to NSF's behavioral and social science research programs, we are extremely encouraged by the budget request for these areas. NSF's Social, Behavioral and Economic Sciences (SBE) Directorate is slated for a $29 million increase, which would bring the directorate to a total of $175 million.

This Committee has a history of strong support for behavioral and social science research at NSF dating back several years. You were instrumental in the establishment of a separate directorate for these sciences at NSF, and later, in the establishment and funding of NSF's Human Capital Initiative, a cross-disciplinary research agenda linking research in the behavioral and social sciences to issues of broad national concern, such as literacy, productivity, aging, violence, and health. We ask that you continue this record of support in fiscal year 2001. The SBE directorate is a primary source of federal support for fundamental research on social, cognitive, psychological and economic behavior as well as for research on the intellectual and social contexts that govern the development and use of science and technology. The fiscal year 2001 request would give a much-needed boost to basic behavioral and social science research in a number of exciting areas. The field is more than ready to absorb these increases.

Within SBE, the Behavioral and Cognitive Sciences (BCS) Division would receive an increase of $13.9 million, which would bring BCS to $59.3 million. While not a large amount of money, the requested increase would allow NSF to support an important initiative in cognitive neuroscience. This initiative, which spans programs in human cognition, child development, social psychology, and linguistics, involves basic science aimed at understanding the human capacity for thought, language, and learning. Research in these areas will increase our understanding of learning and memory, and provide the underpinnings for applications as diverse as teaching children to read or developing a computer that can "talk." Understanding how children and adults learn, how the social and physical environment interacts with learning, how motivation and personal experience guide the capacity to learn, and how best to prepare our nation's citizens for the future workplace requires a solid foundation of basic research in the behavioral and cognitive sciences.

The fiscal year 2001 budget request also supports the role of behavioral and social science research in NSF's crosscutting initiatives, including initiatives in information technologies research and in research on the 21st century workforce. In the area of information technologies, $6 million of the SBE budget request will be used to harness the power of the Internet for research, by testing potential new Internet-based research techniques and using the Internet to expand science's capacities for data-sharing, simulation, and computation. In the workforce initiative, SBE will provide $3 million for fundamental research on science and math learning, human-computer interaction, and encouraging diversity in the workforce.

Turning now to issues of training, we believe strongly that NSF's expansion of its behavioral and social science research programs must also include an increase in its support for young investigators in these areas. Ensuring an adequate future supply of investigators is essential to maintaining our momentum in the development of new knowledge. We ask that you encourage NSF to develop a program of small grants similar to the B/START[1] mechanism in use at the National Institutes of Health which is successfully increasing the number of young behavioral scientists in many areas. These grants support young investigators at a critical juncture in their careers, and allows them to develop the pilot data they need to compete for grant awards.

On a related matter, NSF has indicated that it is planning to increase the size and duration of its grant awards. This is especially important in the behavioral and social sciences, given their greater need for catching up in both size and duration compared with grants in other areas of science. We raised this issue with you and your House colleagues last year, and we again ask you to ensure that NSF extends this much-needed policy to all areas of science.

Finally, NSF has made public understanding of science one of its science education priorities. We applaud NSF's leadership in this area, and we believe that the success of these efforts would be enhanced by focusing on examples from behavioral and social science research. These sciences have unique potential to increase science literacy because of their intrinsic relevance to daily life. That is, in addition to promoting understanding of questions in physics and math, NSF could also be promoting the scientific understanding of how memory takes place, or the value of certain organizational structures in industry. In a similar vein, I'm pleased to note that public understanding of psychological science is also a priority at the American Psy-

[1] Behavioral Science Track Award for Rapid Transition.

chological Society. Next month we will publish the first issue of a new journal, Psychological Science in the Public Interest, which will present reports modeled after those generated by the National Research Council. Developed by panels of distinguished scientists, these reports focus on issues where psychological science can contribute to our understanding of topics of national importance. The first issue describes ways to improve diagnostic decision-making over a wide range of situations using techniques from psychological science. Scientists have developed rigorous statistical procedures that have enormous potential to increase the accuracy and usefulness of such diverse applications as detection of breast cancer; improving weather forecasts; analyzing structural flaws in airplanes; and possibly even the prediction of violence. Future issues of PSPI will address questions such as: Does classroom size matter? Do herbal remedies improve memory or intelligence? Does SAT coaching work? Do popular psychological tests such as the well-known Rorschach test or the MMPI really tell us anything? And to ensure that PSPI reports will reach the widest possible audience, we will be working with Scientific American to develop articles for the magazine that will be based on the studies first published in Psychological Science in the Public Interest.

Mr. Chairman, as I noted earlier, this Committee has made an enormous difference in the vitality of the nation's basic behavioral and social science research activities through its support for NSF's programs in these areas. You and your colleagues in the House deserve much of the credit for enabling the explosion of new knowledge and discoveries in these areas. We are grateful for your continued support, and we ask that you fully fund NSF's budget request for fiscal year 2001 in order to sustain this momentum.

Thank you for the opportunity to submit this statement. I would be pleased to provide additional information on any of the issues raised.

PREPARED STATEMENT OF THE AMERICAN CHEMICAL SOCIETY, THE AMERICAN MATHEMATICAL SOCIETY, THE AMERICAN PHYSICAL SOCIETY, AND THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY

Mr. Chairman, Mr. Mollohan, members of the committee: Thank you for the opportunity to submit testimony to you during consideration of the fiscal year 2001 Appropriations budget for the National Science Foundation (NSF). To demonstrate the uniform support for this unique federal agency across the scientific community, the American Chemical Society, the American Mathematical Society, the American Physical Society and the Federation of American Societies for Experimental Biology offer a joint message in support of the valuable contributions made to the nation through NSF-supported science and the need to strengthen our investment in its programs to ensure continued economic returns and societal benefits.

First, we greatly appreciate this subcommittee's work to increase funding for the National Science Foundation in recent years. We realize that this decision required the committee to make some hard choices. We are confident that they were wise ones.

Investing in NSF produces high returns. We have seen first hand how NSF-sponsored research has helped spawn numerous technologies over its 50-year history, including MRIs, lasers, and the Internet. Moreover, economists have concluded that today's unprecedented growth in the GDP with low unemployment and low inflation would have been impossible without the substantial investments in basic research made during the past decades.

Yet, despite the high return on basic research investments—at least 30 percent by conservative economic estimates—industrial leaders tell us that our nation under-invests in fundamental science. These same leaders say that American industry, competing in the global market place, cannot make the necessary commitments to long-term research. That, they say, must be primarily a public responsibility. We concur. Without it, as former Presidential Science Advisor Dr. Allan Bromley noted in a Washington Post op-ed, the economy of tomorrow will falter and the projected federal surplus will cease to materialize.

This year presents Congress with an extraordinary opportunity to address our under-investment in basic research. Our economy is strong, federal revenues remain high and we have begun to pay down the national debt. We believe the $4.6 billion request for NSF, a 17 percent increase over current levels, is long overdue. And we strongly urge the subcommittee to support such an increase. We also believe that this year's budget should be a down payment on a five-year growth plan that would double NSF funding by 2005.

The basic research supported by the NSF generates new knowledge that underlies technological advances in the private sector. It helps train the next generation of

scientists, engineers, and mathematicians, and it provides the foundation for R&D programs of key mission agencies, such as NIH, DOE, NASA and DOD. Finally, although the NSF accounts for only four percent of the total federal R&D budget, the Foundation is the prime source of funding for non-medical basic research at colleges and universities.

This is a great time to be a scientist. New tools and technologies enable us to perform research more rapidly and more effectively than ever before. Startling and revolutionary discoveries greet us at an ever-accelerating rate. And electronic communications allow us to work directly with colleagues around the world as though they were just down the hall. Where would science and the new economy be today without the World-Wide-Web, a creation of physicists and engineers?

That observation leads directly to one of our principal points—the interdependence of the sciences, one of the reasons why the four groups are presenting a single statement. Discoveries in physics affect biology; breakthroughs in materials research have a profound impact on medicine; new mathematical approaches enable all the sciences and engineering; and advances in biology propel chemistry and physics. Engineering and computer science provide critical tools upon which all of us depend in our research laboratories. We're all in this marvelous enterprise together.

We all stand firmly behind the goal of funding a broad spectrum of disciplines. We strongly believe that we will only realize the tremendous potential for progress in biological and medical research if there is a steady flow of new insights from other scientific fields. While medicine has always drawn upon other fields, its reliance today on biology, physics, chemistry, computer science and engineering is greater than ever.

Consider just one example—magnetic resonance imaging, or MRI, as it is often called. That diagnostic tool, one of the most important medical advances ever, came from physics, chemistry, computer science, and mathematics. Such non-invasive techniques have enabled physicians to make precise diagnoses of tumors and other disorders without performing costly, high-risk operations. Today, researchers are using even more powerful imaging tools to unlock the mysteries of the brain.

NSF is the only federal agency whose sole mandate is to support basic research and science education across all disciplines. Its programmatic structure fosters interdisciplinary research, where much of the most exciting, cutting-edge science is occurring. These are two critical aspects to the past success and future potential of the Foundation.

As we have stated, and as Federal Reserve Chairman Alan Greenspan has noted on several occasions recently, technology has been the prime driver of our nation's economy during its extraordinary growth in the 1990's. Whether we will be able to sustain the momentum in the new millennium depends upon the wisdom we bring to our science investments today.

In submitting his budget request to Congress in February, President Clinton highlighted the NSF's premier science research and education record with his call for an increase of nearly 20 percent in this 50th anniversary year. The President's request also calls for balancing the increase between focused research initiatives in nanoscience, information technology, biocomplexity and science education, on one hand, and the core research programs in the traditional disciplines, on the other. We urge you to adopt a similar approach in your subcommittee mark-up.

Science has come a long way since 1950, when the NSF began its work. The boundaries between the traditional disciplines have become increasingly blurred, and the advances in the different disciplines have become increasingly interdependent. The scientific frontier no longer seems to fit conveniently into one discipline or another. For this reason we strongly support initiatives that cut across disciplines, such as those the President identified this year.

There is little doubt that nanoscience—the thread upon which Moore's Law hangs—and information technology—the clear promoter of today's economy—will be at the cutting edge of research in the coming decades. So too, will our study of complex systems. And as our nation becomes ever more reliant on science and technology, we most hone our teaching methods in our schools and universities. Therefore, we strongly support the thrust of the initiatives identified in the presidential request.

Still, we note that today's science frontier will be tomorrow's science establishment. There will always be a new frontier, but we do not know where it will be. Therefore, we strongly support the NSF's request for corresponding increases in the research programs in the core disciplines. Only by maintaining a wide base of scientific knowledge can we prepare ourselves to tackle the new frontiers, wherever they may appear.

Balancing clearly identifiable near-term goals with less discernable, but no less important long-term needs, is a delicate task. Still, we believe that this committee

has the ability to do just that. Mr. Chairman, we hope that our testimony today provides you and your committee members with some guidance and perspective from science practitioners who have joined together with a unified message.

Mr. Chairman, as we have stressed, our nation benefits tremendously from research supported by the National Science Foundation. Fundamental knowledge gained from this research often forms the basis for the development of new technologies: in medicine, the environment, telecommunications, defense and agriculture, to name just a few areas. We will list a few specific examples.

First, in medicine the NSF currently supports researchers who are developing software that will facilitate real-time magnetic resonance imaging (MRI) data processing so that three-dimensional brain images can be produced in minutes. Currently, because of the massive amounts of data generated from MRI brain scans, hours, even days, are needed to process the data.

Another NSF-supported research group has developed a method to detect pre-cancerous cells. This method, applied in clinical trials, has demonstrated significantly improved efficacy in detection of early stage cervical cancer, as compared to existing technologies.

In the environmental arena, discovering cheaper and more benign solvents to replace toxic volatile organic solvents for polymer synthesis is a critical problem. NSF-supported research has led to an environmentally benign method of polymer synthesis. Several chemical companies are supporting the development of products for commercial use based on this research.

Furthermore, scientific discoveries often depend on complex mathematical modeling and computational algorithms. NSF supports research in mathematics that is related to many scientific problem areas. For example, to model combustion it is necessary to understand the detailed chemical mechanisms by which fuel and air react to form combustion products. Mathematicians and chemists have worked together on computational tools critical to the development of reaction mechanisms.

These are just a few of the areas where NSF-supported research is making significant contributions to society. We conclude with just a few other observations about the nature of NSF's operation.

The NSF is widely regarded as a sound steward of the taxpayer's investment. The NSF is one of the most efficient of all federal agencies, by almost any measure. It spends only about five percent of its budget on administration and management. Moreover, NSF awards funds to researchers only after a rigorous merit-review process using expert peers. Although NSF funds about 20,000 grants in any given year, it is forced to turn down approximately two-thirds of all new proposals each year.

Not only will increased funding allow NSF to fund more outstanding proposals, it will allow NSF to increase the size and duration of its grants—a longstanding goal of the Foundation—without limiting the number of new awards. Reducing the time researchers spend writing proposals will free up more time for research and increase the overall return per dollar invested. Longer grants should also encourage more high-risk, and potentially high-payoff, research.

Mr. Chairman, it's hard to overstate how central NSF is to basic scientific and engineering discoveries. NSF provides the cornerstone of new knowledge across scientific disciplines and, as such, plays a key role in maintaining the nation's scientific and economic leadership. Put most simply, NSF is a true investment in our nation's future. Thank you for your attention to this important opportunity within the federal investment to build toward the country's future.

PREPARED STATEMENT OF THE NATIONAL COUNCIL FOR SCIENCE AND THE ENVIRONMENT

SUMMARY

The National Council for Science and the Environment (formerly the Committee for the National Institute for the Environment) strongly supports the President's proposed 17.1 percent increase for the National Science Foundation (NSF) in 2001. We encourage the Committee to provide at least this level of funding, with a goal of a Foundation budget of $10 billion in 5 years.

We emphasize the request for "biocomplexity in the environment" and encourage the Committee to strongly support full and effective implementation of the National Science Board report, "Environmental Science and Engineering for the 21st Century: The Role of the National Science Foundation," approved on February 2, 2000.

TESTIMONY

The National Council for Science and the Environment (NCSE) thanks the Committee for the opportunity to provide testimony on the National Science Foundation (NSF) and its proposed budget for fiscal year 2001.

NCSE is a nonprofit, nonpartisan organization dedicated to improving the scientific basis of environmental decisionmaking. The work of NCSE is endorsed by more than 475 organizations ranging from the U.S. Chamber of Commerce to the Sierra Club, and including the National Association of Attorneys General, National Association of Counties and other governmental associations, more than 285 colleges and universities, and more than 80 scientific and professional societies. The President's budget and a new report from the National Science Board provide the first real opportunity for the significant expansion of NSF's activities to help to improve environmental decisionmaking.

OVERALL BUDGET REQUEST

The science, engineering, education and related activities supported by NSF are essential to the future well-being and prosperity of the nation and deserve the highest priority by Congress. The long-term prosperity of the nation depends on a steady and growing commitment of this Committee to providing support for science.

NCSE strongly encourages the Committee to support and fully fund, at a minimum, the President's proposed 17.1 percent increase for the National Science Foundation in 2001. We hope that this will be part of a bipartisan commitment to increase the total funding level of the NSF to $10 billion over the next 5 years—the goal of the Coalition for National Science Funding, of which NCSE is a member.

BIOCOMPLEXITY IN THE ENVIRONMENT

NCSE is particularly supportive of the $136 million proposed for NSF's biocomplexity and the environment initiative. The time is indeed overdue for NSF to take a lead at providing a comprehensive scientific understanding of the environment.

NSF is already the leading federal sponsor of peer-reviewed research regarding the environment, with a portfolio exceeding $600 million. However, most of this is directed at scientific advances within particular disciplines. In contrast, an inter-disciplinary approach is needed to really understand the environment. The biocomplexity and the environment initiative is the first step towards a comprehensive understanding.

The resolution of many important environmental and societal problems is lagging because there is an insufficient scientific basis. In most cases, because the problems are cross-disciplinary, an expansion of the biocomplexity approach at NSF could lead to significant progress in understanding. We highlight three such areas:

Economics and ecology.—In the April 2000 issue of Bioscience (the journal of the American Institute of Biological Sciences) which highlights the integration of ecology and economics, Almo Farina writes,

"It now appears clear that the maintenance of a healthy society requires not only a healthy economy, but also a well-conserved natural system. Conversely, negative feedbacks will ultimately affect economic processes when this natural system is damaged."

Economists and ecologists are only now beginning to learn how to talk with one another. Significant methodological barriers inhibit collaboration. To date, NSF has no research program in ecological economics, but will be holding a preliminary workshop in June.

Ecological effects of genetically modified organisms.—Despite tremendous advances in genetics and biotechnology, public concerns about ecological effects of genetically modified organisms are limiting commercial applications of biotechnology in agriculture. The alleged effects are the same ones that were raised when biotechnology began 15 years ago. Yet, the research to address these claims has not been undertaken. A Natural Academy of Sciences report, released last week, called for additional research to examine ecological concerns related to agricultural biotechnology (Genetically Modified Pest-Protected Plants: Science and Regulation, April, 2000). A joint research program involving NSF, USDA, and EPA could do much to help decisionmakers and the public to understand what risks, if any, are posed by genetically modified organisms in an agricultural environment.

Environmental causes of infectious diseases.—In the past decades, infectious diseases have made a comeback in the U.S. and other parts of the world. These include diseases once thought to be largely under control, such as malaria, and new diseases or diseases that have sprung up in new places including AIDS, hanta virus, dengue fever, and most recently West Nile virus. In most cases, environmental change has

been implicated as a causative agent. In fiscal year 2000, NSF and the National Institutes of Health (NIH) are cooperating for the first time to solicit research proposals on "ecology of infectious disease". This program could be expanded greatly with benefits for all humanity.

The present biocomplexity initiative (beginning with the $50 million appropriated in fiscal year 2000) is an important beginning that can lead to investigations such as outlined above. The scientific community is ready to take advantage of such multi-disciplinary funding opportunities—NSF received more than 350 research proposals and more than 150 proposals for "incubator grants" in response to their fiscal year 2000 special competition on biocomplexity in the environment. This demonstrates the readiness of the scientific community to embrace this overdue new perspective on behalf of NSF. We strongly urge the Committee to be supportive of the biocomplexity in the environment initiative and provide the requested funding.

NATIONAL SCIENCE BOARD REPORT ON ENVIRONMENTAL SCIENCE AND ENGINEERING

The National Council for Science and the Environment is the primary proponent of the effort to expand, improve and enhance the relevancy of the scientific efforts of the National Science Foundation regarding the environment. We believe that NSF as an independent, non-regulatory science funding agency can be the ideal source for credible scientific information about the environment.

We greatly appreciate the past support of the Appropriations Committee for this effort, particularly language included in the fiscal year 1998 House-Senate Conference Report (105–297) which stated,

"Finally, the conferees encourage the National Science Foundation to study how it would establish and operate a National Institute for the Environment."

Ultimately, the National Science Board (NSB) responded by unanimously approving a report, "Environmental Science and Engineering for the 21st Century: The Role of the National Science Foundation," in final form on February 2, 2000.

The NSB report sets out a bold, ambitious set of recommendations that could transform NSF's role in support of science to improve environmental decision-making. The recommendations, if implemented effectively, have the potential to accomplish most of the objectives that NCSE and its supporters have worked for over the past decade.

With respect to the NSB report, we would like to highlight the following points:

—The NSB recommends that "environmental research, education and scientific assessment should be one of the highest priorities for NSF" with a significant increase of funding from the present $600 million to $1.6 billion annually, over 5 years.

—The NSB recommends the development of "an effective organizational approach that meets all the criteria required to ensure a well-integrated, high priority, high visibility, cohesive and sustained environmental portfolio within NSF".

—The NSB makes 10 recommendations in the areas of research, education, scientific assessments, infrastructure, information, and partnerships.

—The NSB recommendations are consistent with the direction advocated by the Appropriations Committee and represent an expanded role and portfolio for NSF in environmental research, education, scientific assessments and information distribution. The recommendations of this report will need the support of Congress to become reality.

—Because of this report and its adoption by the NSB, we have suspended our call for a National Institute for the Environment (NIE) in favor of the full and effective implementation of this report. To ensure that there is no misinterpretation of our support for NSF's proposed activities, we have changed our name from the Committee for the National Institute for the Environment to National Council for Science and the Environment.

—These recommendations have strong support. Attached to our testimony is a copy of a letter to the Director of the Office and Management budget signed by the heads of nearly 180 scientific, academic, business, government and environmental organizations including the U.S. Chamber of Commerce and the Sierra Club.

—We respectfully request that this committee ensure that the recommendations become reality, beginning with supportive report language in the fiscal year 2001 appropriations bill, as well as full funding for the currently proposed activities.

OVERSIGHT

There will be the need for oversight, as well as funding from this committee, in order that the goals of the report be accomplished. Historically, not enough of NSF's

science support has been directed towards preventing environmental problems. Additionally, the disciplinary structure of NSF is a barrier to accomplishment of the multi-disciplinary and interdisciplinary approach to science necessary to understand, prevent, and solve environmental problems. Also, NSF traditionally does little to ensure that its research results are transmitted to the members of the public who need scientific information such as state and local government representatives, businesses and community groups nor does it seek their advice in developing its environmental portfolio. The recommendations of this report, particularly both keystone recommendations, have the potential to overcome these drawbacks and lead to the credible science needed for informed decisions on environmental issues.

With sufficient Congressional oversight and funding, the NSF effort can institutionalize the principles of sound science for the environment.

We again encourage you to use the NSF appropriation bill as a way to express the Committee's support for the recommendations of the NSB.

Thank you very much for your support of science to improve environmental decisionmaking.

LETTER TO WHITE HOUSE OFFICE OF MANAGEMENT AND BUDGET URGES INCREASED RESOURCES FOR NATIONAL SCIENCE FOUNDATION

NOVEMBER 17, 1999.

JACOB LEW,
Director, Office of Management and Budget,
Executive Office of the President, Washington, DC.

DEAR MR. LEW: As you prepare the President's budget submission for fiscal year 2001, we encourage you to provide a substantial increase for the National Science Foundation (NSF). This is necessary for many reasons, such as implementing the expanded portfolio of environmental science and engineering activities recommended by National Science Board in the recently approved interim report, "Environmental Science and Engineering in the 21st Century: the role of the National Science Foundation."

The NSF is the nation's premier science funding agency that supports fundamental science and engineering. As such, it is responsible for much of the science that underlies the advances in knowledge and technology that have driven the economic growth of the past five decades and that allow the high standard of living that most Americans enjoy.

Our quality of life depends upon our continued ability to use our natural resources to foster economic opportunity in an environmentally compatible and sustainable way. Scientific knowledge underpins this difficult balancing equation of economic and environmental progress. The NSF, as the nation's leading funder of peer-reviewed extramural science and engineering related to the environment (estimated by NSF at $600 million annually), is essential to the continued generation and use of this knowledge.

The National Science Board (NSB) has identified environmental research, education, and assessment to be one of the highest priorities of NSF and called for a tripling of the NSF investment in this area (Keystone Recommendation (1) We hope that the President's budget for fiscal year 2001 will affirm this priority and provide a significant down payment on the funds needed.

The NSB also recommends that NSF management "develop an effective organizational approach that meets all of the criteria required to ensure a well-integrated, high priority, high visibility, cohesive and sustained environmental portfolio" (Keystone Recommendation (2) We encourage you, in your management role to ensure that such an effective organizational approach is implemented at NSF. Among the criteria listed for an effective organizational approach was "budgetary authority for enabling integration across research, education, and scientific assessment, and across all areas of inquiry." It would seem that this would require, at a minimum, a specific line in the NSF budget identified as an "integrated environment initiative." A budget proposal that simply calls for new funds to be distributed to existing directorates would seem to us to fall well short of what is needed and what is called for by the NSB.

The proposed increase in NSF funding for environmental activities must not come at the expense of other worthy NSF programs. Instead, it should be part of an ambitious plan to double the nation's investment in science and education that has been proposed by this and previous administrations and has recently been endorsed in legislation passed by the Senate.

If the Administration proposes a significant budget increase for NSF, featuring a new budget line for implementing the new environmental report from the NSB, then we, a diverse coalition of organizations that generate and use science for environ-

mental decision making, will help make the case to the Congress and the American public as to why this budget proposal is necessary.

Sincerely,

Peter D. Saundry, Ph.D., Executive Director, Committee for the National Institute for the Environment; Timothy Fortier, Vice President, Business and Industry Association of New Hampshire; Joan Verplanck, President, New Jersey Chamber of Commerce; Richard C. Bartlett, Vice Chairman, Mary Kay, Inc.; Randy Johnson, Chair, Hennepin County Board of Commissioners; Bill Kovacs, Vice President for Environment, U.S. Chamber of Commerce; Patricia D. Parr, President, Association of Southeastern Biologists; Brian M. Boom, President, Association of Systematics Collections; Kimberly A. Gray, Past President, Association of Env. Engineering and Science Professors; Lewis S. W. Crampton, President, Chicago Academy of Sciences; Peter J. Barry, Chair, Council on Food, Agricultural, and Resource Economics; Martin E. Feder, President, Society for Integrative and Comparative Biology.

William Wayt Thomas, Executive Director, Organization for Flora Neotropica; Assad I. Panah, President, Pennsylvania Academy of Science; Edna S. Kaneshiro, President, Society of Protozoologists; John C. Topping, Jr., President, Climate Institute; James D. Lazell, President, The Conservation Agency; Peter H. Bachman, Executive Director, Minnesota Center for Environmental Advocacy; Sarah G. Bishop, President, Partners in Parks; Roger Walker, President, Regulatory Environmental Group for Missouri; Curt Spalding, Executive Director, Save The Bay, Inc.; Carl Pope, Executive Director, Sierra Club; John G. Robinson, Ph.D., Senior Vice President, Wildlife Conservation Society; Val Richard Beasley, DVM, Ph.D, President, American Academy of Veterinary and Comparative Toxicology, Bruce W. Little, DVM, Executive Vice President, American Veterinary Medical Association.

Robert H. Poppenga, DVM, Ph.D., Secretary/Treasurer, American Board of Veterinary Toxicology; Diana B. Stein, President, American Fern Society; G. N. Rassam, Ph.D., Executive Director, American Fisheries Society; James B. Gloer, President, American Society of Pharmacognosy; Kristin L. Vehrs, Deputy Director, American Zoo and Aquarium Association; Paul A. Hanle, President and CEO, Academy of Natural Sciences; Gary P. Garrett, Ph.D., Chairman, Desert Fishes Council; Joseph C. Mitchell, President, The Herpetologists' League; T. Nejat Veziroglu, President, International Association for Hydrogen Energy; Bruce Hasbrouck, President Elect, National Association of Environmental Professionals; Gregory R. Long, President and CEO, New York Botanical Garden; Olin M. Ivey, Ph.D., Executive Director, Georgia Environmental Organization; Walter F. Bell, Executive Director, Louisville Resource Conservation Council.

Elliott A. Norse, President, Marine Conservation Biology Institute; John J. Clarke, Director of Advocacy, Massachusetts Audubon Society; David Dempsey, Policy Advisor, Michigan Environmental Council; Peter R. Grant, President, American Society of Naturalists; Gerald Meral, Executive Director, Planning and Conservation League; Rodger Schlickeisen, President, Defenders of Wildlife; David Blockstein, Ph.D., Chairman, The Ornithological Council; Susan J. Mazer, Executive Vice President, Society for the Study of Evolution.

Business, Scientific Societies, and Environmental Organizations.

John T. Gibson, President, Alabama A&M University; William H. Harris, President, Alabama State University; Robert K. Bitting, Asst. VP for Research, Alfred University; Richard J. Cook, President, Allegheny College; Robert H. Devine, President, Antioch College; Theodore Veerkamp, Acting President, Bayamon Central University; Joanne Fox-Przeworski, Director, Center for Environmental Policy, Bard College; Jon Westling, President, Boston University; Richard P. Traina, President, Clark University; Claire Van Ummersen, President, Cleveland State University; James Phifer, President, Coe College; Steven K. Katona, President, College of the Atlantic; Phyllis O. Bonanno, President, Columbia College; Jane L. Jervis, President, Evergreen State College; Anthony James Catanese, President, Florida Atlantic University; Catherine R. Gira, President, Frostburg State University;

Eugene M. Tobin, President, Hamilton College; Thomas R. Tritton, President, Haverford College.

Michael Mooney, President, Lewis & Clark College; Vivian A. Bull, President, Linfield College; Constance Woo, Dean of the Library, Long Island University; James C. Garland, President, Miami University; Joseph A. Caputo, President, Millersville University; James C. Votruba, President, Northern Kentucky University; Robert Glidden, President, Ohio University; Patricia O. Ewers, President, Pace University; Shirley A.R. Lewis, President, Paine College; Graham Spanier, President, Pennsylvania State University; Joan M. Lescinski, CSJ, President, Saint Mary-of-the-Woods College; Richard Yanikoski, President, Saint Xavier University; N. Susan Bakaitis, President, Salem-Teikyo University; Robert A. Corrigan, President, San Francisco State University; Paul L. Locatelli, S.J., President, Santa Clara University; Peter Likins, President, University of Arizona; Daniel D. Bennett, Interim Vice Chancellor for Academic Affairs, University of Arkansas; Richard L. Byyny, Chancellor, University of Colorado at Boulder.

Georgia E. Lesh-Laurie, Chancellor, University of Colorado at Denver; Walter Harrison, President, University of Hartford; Robert A. Hoover, President, University of Idaho; William O. McCoy, Interim Chancellor, University of North Carolina at Chapel Hill; J. H. Woodward, Chancellor, University of North Carolina at Charlotte; Patricia A. Sullivan, Chancellor, University of North Carolina at Greensboro; Susan R. Pierce, President, University of Puget Sound; William E. Cooper, President, University of Richmond; Mark L. Perkins, Chancellor, University of Wisconsin at Green Bay; Thomas F. George, Chancellor and Professor of Chemistry and Physics, University of Wisconsin at Stevens Point; Philip L. DuBois, President, University of Wyoming; Judith T. Levy, Dean of the College and Vice President for Academic Affairs, Ursinus College; Alan Harre, President, Valparaiso University; Frances D. Fergusson, President, Vassar College; Oswald P. Bronson, Sr., President, Bethune-Cookman College.

William M. Chace, President, Emory University; Joseph A. O'Hare, S.J., President, Fordham University; Richard R. Rush, President, Minnesota State University at Mankato; Richard M. Freeland, President, Northeastern University; Kenneth P. Mortimer, Chancellor, University of Hawaii at Manoa; Larry Shinn, President, Berea College; Carl V. Patton, President, Georgia State University; Roger W. Bowen, President, SUNY—New Paltz; George Rupp, President, Columbia University; Edward R. Jackson, Chancellor, Southern University and A&M College at Baton Rouge; David H. Swinton, President and CEO, Benedict College; Frank G. Pogue, President, Edinboro University of Pennsylvania; Samuel H. Smith, President, Washington State University; Carl W. Vogt, President, Williams College; William Adams, President, Bucknell University; James E. Lyons, Sr., President, California State University at Dominguez Hills; John D. Welty, President, California State University at Fresno.

Donald R. Gerth, President, California State University at Sacramento; Marianne E. Inman, President, Central Methodist College; Matthew Goldstein, Chancellor, The City University of New York; William J. Cibes, Jr., Chancellor, Connecticut State University System; Robert F. Vagt, President, Davidson College; Thomas C. Learner, President, Delaware Valley College; John E. Murray, Jr., President, Duquesne University; Richard R. Eakin, Chancellor, East Carolina University; David R. Black, President, Eastern College; Steve A. Favors, President, Grambling State University; Kathleen A. Ross, SNJM, President, Heritage College; Roberto Marrero-Corletto, Chancellor, Humacao College, University of Puerto Rico; Myles Brand, President, Indiana University; Lawrence K. Pettit, President, Indiana University of Pennsylvania; Bettye Ward Fletcher, Interim President, Jackson State University; Carol Cartwright, President, Kent State University; Ernest L. Holloway, President, Langston University, Susan A. Cole, President, Montclair State University; Ronald G. Eaglin, President, Morehead State University; Joanne V. Creighton, President, Mount Holyoke College.

Harold M. Kolenbrander, President, Mount Union College; Jerry C. Lee, President, National University; Charles A. Hines, President, Prairie View A&M University; A. Neal Mangham, President, Prescott Col-

lege; Robert A. Scott, President, Ramapo College of New Jersey; Paul B. Ranslow, President, Ripon College; David L. Beckley, President, Rust College; Daniel F. Sullivan, President, St. Lawrence University; John H. Keiser, President, Southwest Missouri State University; Audrey F. Manley, President, Spelman College; Richard B. Flynn, President, Springfield College; Paul Yu, President, SUNY—Brockport; Horace A. Judson, President, SUNY—Plattsburgh; Hoke L. Smith, President, Towson University; James J. Stukel, President, University of Illinois at Urbana-Champagne; John W. Shumaker, President, University of Louisville, Nancy Martin, VP for Research, University of Louisville; Peter S. Hoff, President, University of Maine; D. N. Langenberg, Chancellor, University of Maryland System.

Mark G. Yudof, President, University of Minnesota; Richard L. Wallace, Chancellor, University of Missouri—Columbia; Marjorie Smelstor, Interim Provost and Vice Chancellor for Academic Affairs, University of Missouri—Kansas City; Blanche M. Touhill, Chancellor, University of Missouri—St. Louis; George M. Dennison, President, The University of Montana; Robert E. Alexander, Chancellor, University of South Carolina at Aiken; Thomas J. Tighe, Acting President, University of South Florida; Barbara J. Byrne, Vice President for Academic Affairs, University of the Sciences in Philadelphia; Robert W. Lawless, President, The University of Tulsa; Geoffrey Gamble, Provost, University of Vermont; Gary A. Ransdell, President, Western Kentucky University; M. Lee Pelton, President, Willamette University; Perry Moore, Provost, Wright State University; Robert B. Sloan, Jr., President, Baylor University; Kathryn Mohrman, President, Colorado College; Delbert W. Baker, President, Oakwood College; Sally Mahoney, President, Our Lady of the Lake University; Karen W. Morse, President, Western Washington University; Warren J. Baker, President, California Polytechnic University; Alfred F. Hurley, Chancellor and President, University of North Texas; Ben E. Johnson, President, Peru State College; Charles E. Kupchella, President, University of North Dakota; Joseph N. Crowley, President, University of Nevada—Reno.

College and University Heads.

PREPARED STATEMENT OF THE AMERICAN CHEMICAL SOCIETY

The American Chemical Society (ACS) would like to thank Chairman Christopher Bond and Senator Barbara Mikulski for the opportunity to submit testimony for the record on the Departments of Veterans Affairs and Housing & Urban Development, and Independent Agencies Appropriations bill for fiscal year 2001.

As you may know, ACS is a non-profit scientific and educational organization, chartered by Congress, representing 161,000 individual chemical scientists and engineers. The world's largest scientific society, ACS advances the chemical enterprise, increases public understanding of chemistry, and brings its expertise to bear on state and national matters. ACS firmly believes that no investment the government makes generates a higher rate of return for the economy than research and development (R&D). In fact, economic experts maintain that today's unprecedented economic growth would not have been realized but for the substantial research investments by the public and private sectors over the past few decades. Looking ahead, the American Chemical Society (ACS) is concerned that constant dollar declines in federal support for basic research over the past decade, particularly in the physical sciences, have weakened the roots of innovation in all fields and put future economic growth at risk. In order to sustain our technological leadership and living standards, increased funding for basic research should be a top priority for use of the non-Social Security budget surpluses. As a framework for increasing R&D funding, ACS supports doubling federal spending on research within a decade, as well as balanced funding among different areas of science.

NATIONAL SCIENCE FOUNDATION BUDGET RECOMMENDATIONS

ACS strongly supports the fiscal year 2001 budget request of $4.6 billion for the National Science Foundation (NSF), which would be a 17 percent ($675 million) increase over last year's appropriation. As the lead source of federal funding for basic research at colleges and universities (excluding medical research), NSF supports research and education programs that are crucial to technological advances in the private sector and for training the next generation of scientists and engineers. The re-

quested funding would allow NSF to increase its impact on science and mathematics education, more fully meet the enormous opportunities in core disciplinary research areas, and enhance multidisciplinary research in areas identified as national needs (e.g. nanotechnology and biocomplexity research).

CORE DISCIPLINARY RESEARCH

ACS strongly supports the 19-percent increase requested for NSF research activities and wholeheartedly endorses the administration's proposal to dedicate most of the increase to core research. In fact, a strong increase for NSF should form the basis of a bipartisan effort to revitalize the critical federal investment in basic research that extends the frontiers of science. Although long-term research in the core science disciplines has been the mainstay of our research enterprise for decades, higher profile, initiative-based R&D has overshadowed its importance in recent years. Unless basic knowledge in chemistry, physics, mathematics and other core areas—the roots of technological innovation—is advanced, complex multidisciplinary R&D in areas like information technology and biocomplexity will suffer. As the only agency charged with maintaining progress in science and engineering across all disciplines, NSF is in the best position to invigorate this critical research.

FOCUSED INITIATIVES

Nanoscale Science and Engineering.—The Society believes that the $216 million NSF has requested for nanoscale science and engineering is an important and timely investment. Nanotechnology is a cutting-edge field that holds enormous potential for improving the understanding and control of individual atoms and molecules. This interdisciplinary research, which involves some of the most modern chemistry being conducted at universities and national laboratories, could make possible the building of devices that are incomprehensibly small—on the scale of human cells, which could revolutionize areas ranging from manufacturing and advanced materials to medicine and the environment. NSF research will support biosystems at the nanoscale, novel phenomena and quantum control, and nanoscale processes in the environment. Emphasis should be placed on long-term research in this multiagency initiative and strong coordination among NSF, which plays the lead federal role, and other agencies should be encouraged.

Biocomplexity in the Environment.—ACS applauds NSF's growing commitment to developing sound science for the environment as recommended by the National Science Board. The $136 million requested for the Biocomplexity in the Environment initiative represents an investment on a scale that can effectively begin to meet the needs in this area. Understanding the powerful interactions that occur within complex biological systems and between these systems and the Earth's environment will lead to a better understanding of natural processes and the effects of human behavior on the natural world. The Society is concerned, however, that too narrow a focus has been given thus far to the truly interdisciplinary challenge envisioned by NSF in this area. In addition to the clear contributions of the geological and biological sciences, ACS recommends that the focus of the program be expanded to fully capture the potential contributions of the physical sciences for identifying and crafting solutions to environmental challenges.

GRANT SIZE AND DURATION

NSF traditionally receives high marks for efficiency—less than 4 percent of the agency's budget is spent on administration and management. Also, NSF awards funds to researchers only after a rigorous merit-review process using expert peers. While NSF funds 20,000 awards each year, it is forced to turn away twice as many, including thousands from first-rate but less established scientists and engineers. Not only will increased funding allow NSF to fund more outstanding proposals, it will allow NSF to increase the size and duration of its grants—a longstanding goal of the Foundation—without limiting the number of new awards.

For 50 years, NSF's balanced research portfolio has improved our economy, environment, and way of life. The Foundation's quality investments in research have spawned advances such as lasers, environmental technologies, polymers, and Doppler radar, as well as entire new industries such as biotechnology and the Internet. NSF is an investment in the true sense of the word.

PREPARED STATEMENT OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

The National Science Foundation (NSF) Task Force of the Council on Education of the American Society of Mechanical Engineers (ASME International) is pleased to provide comments on the NSF fiscal year 2001 budget request.

ASME International is a worldwide engineering society focused on technical, educational and research issues. It conducts one of the world's largest technical publishing operations, holds some 30 technical conferences and 200 professional development courses each year, and sets many industrial and manufacturing standards. This testimony represents the considered judgment of the NSF Task Force of the Council on Education and is not necessarily a position of ASME International as a whole.

NSF FISCAL YEAR 2001 BUDGET REQUEST OVERVIEW

The National Science Foundation plays a critical leadership role in support of the nation's scientific and engineering research. Through thoughtful and visionary planning, NSF has greatly contributed to the technological leadership that the United States enjoys today. ASME International shares NSF's broad-based, cross-cutting vision for basic engineering and scientific research. As such, the Society strongly endorses the Foundation and its efforts to continually improve and expand the "innovative ideas, outstanding people, and cutting-edge tools" that comprise the nation's technological and scientific infrastructure.

There is an increased awareness of the importance of science and technology in modern society and also a recognition of the quality of leadership NSF has demonstrated in support of the nation's research and education at American colleges and universities. The fiscal year 2001 NSF Budget Request reflects a substantial increase ($675M or 17.3 percent) over fiscal year 2000 spending estimates, a very positive trend that the Task Force supports. In the context of engineering related research, the increase is about 20 percent.

Unlike the fiscal year 2000 budget request, where the lion's share of funding increases supported the Information Technology Initiative, requested funding increases for fiscal year 2001 are distributed across Foundation initiatives as well as the core programs. This would indicate a renewed awareness within NSF of the importance of its core programs, an awareness applauded by the Task Force. After all, many of the initiatives of today are fruits of research conducted using core program funding in the past.

The breadth of NSF's commitment and vision is evident from, but certainly not limited to, the Foundation's four major initiatives for fiscal year 2001. These are:

—Information Technology Research (ITR);
—Nanoscale Science and Engineering (NNI)
—Biocomplexity in the Environment (BE); and,
—21st Century Workforce (Workforce).

Three of the four initiatives, ITR, BE and Workforce, are continuations of initiatives from fiscal year 2000. Work on nanotechnology has been a focal point of previous and ongoing NSF support. However, it has been identified as a major initiative in the fiscal year 2001 Budget Request. This reflects the Clinton Administration's emphasis on its National Nanotechnology Initiative (NNI).

THE NSF TASK FORCE POSITION

Affirmation and endorsement

The NSF Task Force strongly supports the principles and priorities outlined in the NSF fiscal year 2001 Budget Request (Addendum). The expanded support for far reaching research within the core programs, especially that associated with the four priority investment areas (ITR, NNI, BE, and Workforce), address major national needs for the 21st century. The initiatives are of vital importance and are being implemented at a critical juncture in the nation's technological development. At the same time, visionary investment in core programs ensures that the nation will have the scientific expertise combined with technological agility to respond to both opportunities and impediments well into the future.

The Engineering Directorate (ENG) has identified five major emphasis areas for the coming year, including: biotechnology; engineering education; nanotechnology; service sector engineering; and, wireless. Of these five, nanotechnology has perhaps the greatest emphasis in ENG, reflecting the national priority embodied in the National Nanotechnology Initiative.

Through NNI funding, exciting new and highly successful existing programs will be carried out with the goal of revolutionizing technology in the early 21st Century. The rapid shrinking of materials and devices in the nanoscale regime will help de-

velop technology and engineering microsystems that will strongly influence the fields of biotechnology and information technology. ENG continue to explore the potential impact of a number of NNI related areas by new program initiatives and workshops in the areas of "Molecular Nanoelectronics", "Biosystems at the Nanoscale", and the "XYZ on a Chip", etc. This is creating a revolutionary environment for large-scale implementation of NNI through nano-miniaturized devices and technology.

The continued focus on education is also particularly laudable. As society evolves and technology advances, the amount of scientific and technological information that a student must absorb and process is ever increasing. The scope of technological problems becomes ever increasingly complex and multidisciplinary. In addition, the manner in which students learn is an evolutionary process requiring constant updating of teaching tools and curricula. In this context, it is essential that science and engineering education remain a top priority for the nation; NSF, and specifically ENG, continues to recognize and support this vitally important mission.

Questions and Concerns

While the Task Force strongly supports NSF and the need for a balanced vision in the nation's science and engineering research portfolio, there are three issues regarding the matter of balance to be raised. These are:

—insufficient support for graduate students in engineering;
—insufficient support for PreK–12 science, math and technology education; and,
—the potential for unbalanced focus within initiatives, particularly in ITR, i.e., the need for better mechanisms for funding complex multidisciplinary initiatives.

The need for sustained graduate student support across all disciplines in science and engineering arises, perhaps counter-intuitively, because of the booming economy driven by the information technology sector. While this boom has tremendous benefits to the nation, there are long-term implications that are not being addressed. Specifically, because of the high demand for engineers in the labor force, there are fewer U.S. students enrolling in advanced engineering degree programs. This is particularly problematic because the sustained growth of IT and all other areas of technology need highly trained leaders and innovators.

From an IT perspective, the reduction in graduate enrollments is somewhat offset by a shift in the graduate population toward IT-related disciplines. However, this exacerbates the "brain drain" from fields not perceived to have any connection to IT. Graduate (and undergraduate) student enrollments in Mechanical Engineering, for example, have been steadily declining over the duration of the current economic boom. The long-term threat this presents to the overall vitality of science and engineering in the United States cannot be neglected.

In spite of this, NSF continues to place a relatively low emphasis on graduate education in its budget request. In the fiscal year 2001 budget request, the increase in funding for graduate education (+14.4 percent) lags behind the overall NSF increase (+17.3 percent). The differential is principally due to reductions in funding for the Graduate Research Fellowship (GRF) program (−1 percent) to $51.75M. Given a planned increase in GRF stipends, even flat funding would mean fewer awards made in fiscal year 2001 and beyond.

NSF has an excellent record of identifying and supporting the best and brightest graduate students in the nation. The recipients of NSF Graduate Fellowships go on to leadership roles in academia, government, and industry. NSF is rightfully proud in highlighting the achievements and awards of past recipients. In a word, Graduate Research Fellows become the educators and technology policy makers of the nation. It is inconsistent with the goals of the Workforce initiative to reduce the funding for developing future leaders in the 21st century.

It appears that the decrease in Graduate Research Fellowships is nominally offset by a requested $15.57M increase to $24.75M for the Graduate Teaching Fellows in K–12 Education program (GK–12). This represents an almost tripling of the program from its inception last year. The GK–12 program supports the use of graduate and advanced undergraduate students as "content resources" for K–12 teachers. The expressed intent is to link the "acknowledged excellence of U.S. graduate education with the critical needs of the K–12 sector".

Increased emphasis on PreK–12 science and math education is a laudable goal that the Task Force strongly supports. In fact, ASME is playing a leadership role in advancing this agenda. It is not clear, however, that the GK–12 program, in and of itself, is an effective tool for either graduate or K–12 education.

With regard to higher education, linking universities and primary-secondary education requires a cultural change in graduate education at the highest levels. University leadership (particularly graduate research advisors) must first recognize the

need for integrated science, engineering and math education from early child development through the Ph.D., and then make curricular changes to implement this integration. Until this happens, it is not clear that a large expansion of the GK–12 program would be appropriate. Given the already stringent demands placed on graduate students today, it is not clear that either graduate education or primary-secondary education will be well served without support from the university faculties and administrations. Perhaps linking the CAREER program with K–12 education and encouraging universities to include educational integration in tenure and promotion criteria may better serve this goal.

From the K–12 perspective, there should be clear evidence that the GK–12 program has a lasting impact in K–12 science and math education. Have K–12 science and math teachers and their curricula been significantly enriched by Graduate Teaching Fellows in the classroom? Are Fellows motivated to pursue K–12 teaching careers? Without strong affirmative answers to these questions, one can hardly justify such a dramatic increase in the GK–12 program.

The unbalanced focus within the Workforce initiative highlights an important issue for funding within all initiatives. Mechanisms need to be put into place through which multidisciplinary initiatives are funded in a truly multidisciplinary way. In fiscal year 2001, some funding for ITR will be provided by the Engineering Directorate. However, in both current and upcoming fiscal years, all new monies for IRT have been or will be placed in the Computer Information Science and Engineering (CISE). ENG's contribution appears to be coming from its existing core programs. While we applaud the move toward ENG participation in Foundation initiatives, ENG should receive new funding to do so. Some of the greatest "show stoppers" in the advance of IT are multidisciplinary and are not at all CISE problems. Examples include heat removal from chips and the failure of electronic leads: these are heat transfer/fluid mechanics and material science/solid mechanics problems, respectively. Other major IT issues which do not fall within the traditional purview of CISE are manufacturing and material processing. It is not at all clear that CISE will recognize and fund research projects to address these critical issues. In general, placing all of the funding for an initiative within a single directorate jeopardizes the formulation of truly multidisciplinary solutions to complex problems.

CONCLUSION

The ASME NSF Task Force strongly supports the balanced priorities articulated by National Science Foundation in the fiscal year 2001 Budget Request. Major, cross cutting initiatives have been identified addressing pivotal technological issues facing the nation. At the same time, the balance includes additional support for research and development in the core programs. There is wisdom in recognizing that core programs are the incubators for tomorrow's initiatives. In the context of engineering, budget planning within ENG clearly reflects the integrated, multidisciplinary vision of the total NSF budget plan.

There is, however, concern about details of the budget request. There appears to be a trend toward reduced emphasis on graduate education in spite of the ever-increasing need for highly trained scientists and engineers in all disciplines. Contrary to its stated mission, there also appears to be reduced funding to support K–12 science, math, and engineering education. There is also a need to distribute funding for the cross cutting, multidisciplinary initiatives across all directorates in a focused and coordinated fashion. In summary, the distribution of funding does not always reflect the visionary intent of the programs.

ASME's NSF Task Force appreciates the opportunity to present its views to the Appropriations Subcommittee on VA, HUD and Independent Agencies.

ADDENDUM

The fiscal year 2001 budget request for the Engineering Directorate (ENG) is $0.46B, an increase of 19.6 percent over the current year. This increase is on par with much of NSF and is slightly ahead of the overall Foundation increase. Engineering remains the sixth largest directorate at NSF behind Mathematical and Physical Sciences ($0.88B), Education and Human Resources ($0.76B), Geosciences ($0.58B), CISE ($0.53B) and Biological Sciences ($0.51B). Funding for mechanical engineering related research within Engineering would rise 18.8 percent to 0.24B. Details of the mechanical engineering component of the NSF budget appear in Table I. It should be noted that, given the multidisciplinary nature of modern engineering research, funding for mechanical engineering related research may be obtained from programs outside of the selected group and outside of Engineering overall.

TABLE I.—DETAIL OF SELECTED MECHANICAL ENGINEERING RELATED PROGRAMS IN THE FISCAL YEAR 2001 BUDGET

[In millions of dollars]

	Fiscal year—		
	1999 budget	2000 estimate	2001 request
NSF Engineering Directorate:			
Chemical and Transport Systems	41.9	44.3	54.4
Design, Manufacture, and Industrial Innovation (excluding SBIR)	45.3	47.3	58.7
Engineering Education and Centers (includes ERC and I/UCRC programs)	62	65	74
Civil and Mechanical Systems	48.1	48.2	56.2

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

PREPARED STATEMENT OF THE CALIFORNIA SCIENCE CENTER, LOS ANGELES, CA

Mr. Chairman, thank you for the opportunity to submit this testimony for the record. I am pleased to share with you details about the Environmental Science Learning Center at the California Science Center, for which the Science Center is seeking federal support in fiscal year 2001. The Science Center will be a national a model for innovative and interactive science education programs that will excite people of all ages about science learning and make the educational experience dynamic, involving and fun. This program is unique in its programmatic and participant make-up and is aimed at improving ecological and environmental science learning opportunities for all of America's children and families.

The mission of the California Science Center is an important part of the State of California science education infrastructure, which supports and complements the efforts of schools throughout the state and provides an important science education model for schools throughout the nation. The programs offered through the Environmental Science Learning Center will be consistent with the National Science Standards for grades K–12 as well as with the American Association for the Advancement of Science Benchmarks for science literacy, which underscore the importance of multidisciplinary teaching and learning opportunities.

Importantly, the Environmental Science Learning Center's program efforts will be consistent with the mission and goals of several federal government agencies in particular, the National Aeronautics and Space Administration's (NASA) Earth Sciences program. A primary focus for NASA's earth sciences program is the support and implementation of science education programs that:

—Contribute to K–12 science and technology education by promoting the involvement of various community sectors
—Enhance the participation of schools and organizations serving a significant number of underrepresented groups
—Leverage the resources of external groups
—Continue to educate and train educators as research evolves and capabilities change
—Raise awareness of policymakers and citizens to enable prudent policy determination regarding global change
—Improve science and mathematics literacy
—Strengthen the interface between educators and scientists and secure greater support by scientists for broad education efforts.

The California Science Center is committed to developing a model Environmental Science Learning Center which will seek to fulfill to the greatest extent possible, NASA's science education mission and, specifically, its "earth sciences" education mission.

In order to establish the new Environmental Science Learning Center, the California Science Center is seeking $27.5 million in federal funding over three years and $10 million in fiscal year 2001 for the creation of the Environmental Science Learning Center. This initiative is a $110 million capital program, inclusive of planning, design, construction, and construction management. The remaining $83.5 million for this program will be raised from private sources and other state and local governmental agencies. The State of California is expected to commit $27.5 million that will permit the design of the new Center to proceed. The State's investment will encourage private donors and other governmental agencies to support this program. The proposed federal share will help leverage the remaining private match.

The Environmental Science Learning Center is the second of three key phases included in the Science Center's institutional development plan. Phase I of the California Science Center Master Plan is now complete—and the results are "wow." On February 7, 1998, 245,000 square-feet of scientific wonders and possibilities opened to the enthusiastic acclaim of guests, educators, students, scientists, the community and the media.

Phase I highlights include Science Plaza, a state-of-the-art IMAX 3D Theater, World of Life and Creative World exhibition galleries, the Weingart Special Exhibits Gallery, the ExploraStore gift shop and dining facilities

In its first year, the California Science Center became an educational destination for 2.1 million visitors—free admission assuring everyone can access the learning and fun. The general audience is composed mainly of families with children between the ages of four and fourteen:

—More than 300,000 students and teachers visit each year

—Underrepresented communities make up the majority of visitors:

But without Phases II and III, the Science Center presents only a portion of the scientific picture envisioned in the Master Plan. It falls short of its educational goals and fails to meet significant portions of the national and state science content standards.

At a time when California students still rank well below the national average in science scores—at a time when science has become an integral part of our daily lives—failure to complete this unique scientific and educational vision would deprive millions of families, teachers and students of vital scientific knowledge they need to succeed in our increasingly technological world.

MEETING OUR MISSION

The mission of the California Science Center is to stimulate and nurture interest in science, math and technology, to take an interdisciplinary approach that places them in a social and cultural context, and to provide leadership within the science education community. We believe the growth of every person depends on knowing scientific principles, processes and applications.

Organized around four scientific concepts, an elementary school and a teacher professional development facility, the Master Plan was developed to meet this mission by presenting a holistic view of the scientific world that is unique in the science center field.

As the Master Plan unfolds and the building expands to accommodate new guest experiences, the dynamic interrelationships between these worlds will educate and astound—encouraging critical and conceptual thinking and make science come alive for millions.

THE MASTER PLAN

In 1988 the leadership of the former California Museum of Science and Industry envisioned transformation of the 45-year-old institution into integrated facilities encompassing over 600,000 square-feet, to be developed in three phases. This became the Master Plan for the California Science Center. Construction began in 1994, with Phase I completed in February 1998.

Viewed together, the four thematic "worlds" of the Science Center provide a compelling and totally integrated presentation of scientific disciplines. In each of these exhibition galleries visitors engage in hands-on activities and can participate in facilitated programs. It is all tied together here from the smallest, single-celled organism to the vastness of the galaxies:

World of Life (Phase I)—the life processes common to all living things

Creative World (Phase I)—the environment we create and build

World of Ecology (Phase II)—an ecosystems view of the earth on which we live, and

Worlds Beyond (Phase III)—the universe in which we live.

As each phase is completed, it meshes with the others—fitting like the pieces of a puzzle—to form a more complete scientific picture of the world and the universe. The subjects each world examines are timeless. The overall picture they present is vital to understanding the world in which we live and our impact on it.

MAKING CONNECTION TO THE CLASSROOM

The exhibits in the four thematic "worlds" support State and National Science Content Standards for grades K–12, as well as American Association for the Advancement of Science Benchmarks for Science Literacy. In both its formal and informal educational capacities, the California Science Center is an important part of the state's science education infrastructure, supporting and complementing the efforts

of schools. It is the only facility in the country combining a major science center, an adjacent science-focused neighborhood elementary school, and teacher professional development center in one location. In addition, the importance of multi-disciplinary learning opportunities, such as those presented at the Science Center, has been underscored by both the State Board of Education and the American Association for the Advancement of Science.

Mr. Chairman, Southern California can be viewed as a microcosm of the nation. With its demographic and geographic base ranging from urban to rural, affluent to economically disadvantaged, and a diverse ethnic population, Southern California is unlike any other location in the country. It is also recognized to have many ecological uniqueness that exist in very few places in the country. These unique factors combined the California Science Centers national recognition as a leader in science education programs, make the Center a perfect location for this Environmental Science Learning Center.

PHASE II: WORLD OF ECOLOGY

Alive with learning opportunities, World of Ecology will present the ecological concepts around which the Earth is organized—from the smallest individual organisms to the entire planet. Combining living organisms and interactive technologies, it will allow visitors to examine the fundamental and often delicate connections between living things and the physical world that shape life on earth.

World of Ecology will illustrate air, land and water environmental relationships. As conceived, the exhibition gallery will allow visitors to explore:

—Living organisms, both aquatic and terrestrial
—Living habitats, both aquatic and terrestrial
—Freshwater, saltwater and land environments
—Physical and life sciences
—Mathematics
—Technology
—Industrial applications, and
—Economic and social sciences.
—And it will provide insights into how human beings influence and are influenced by ecosystems around us.

A strong emphasis will be placed on technology to help visitors understand Earth's ecosystems through various media, such as:

—Hands-on/minds-on exhibits
—Multimedia experiences
—Computer-based models that allow guests to manipulate environmental factors and see the results
—Distance learning technology
—Examinations of the ways technology is used to monitor the Earth's ecosystems, such as tracking of various species, and
—Real-time links to various environments.

To maximize the creativity and brainpower brought to bear on the project a unique design concept is being employed. We have brought together experts who might normally be competitors, including two firms specializing in the design of living habitats for zoos and aquariums, two firms specializing in the design of interactive exhibitry, and two architectural firms. We are excited about the potential of this unique collaborative approach.

The World of Ecology and accompanying expansion will continue the fulfillment of the Master Plan by seamlessly adding 170,000 square-feet to the west side of the Phase I Building. This will more than double the size of the Science Center's existing public exhibition space.

The preliminary budget for Phase II is $110 million, anticipated from a combination of public and private sources. Public and private contributions to Phase I of the Master Plan resulted in an investment of over $200 million for the California Science Center and surrounding Exposition Park.

The Environmental Science Learning Center will create a national model for innovative and interactive science education programs that will excite people about science learning and make the educational experience dynamic, involving and fun. This program is unique in its programmatic and participant make-up and is aimed at improving ecological and environmental science learning opportunities for all of America's children and families.

Again, thank you for the opportunity to submit testimony for the record on behalf of this very important science learning initiative at the California Science Center. I look forward to working with you to make the Environmental Science Learning Center a reality in fiscal year 2001.

Thank you.

PREPARED STATEMENT OF THE UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH [UCAR]

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 U.S. Senate Committee on Appropriations, Subcommittee on VA, HUD and Independent Agencies.

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 due in large part to founding and continued support provided though the National Science Foundation (NSF). 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). In addition to the NSF, UCAR is supported by federal agencies including the National Oceanic and Atmospheric Administration (NOAA), the National Aeronautics and Space Administration (NASA), the Department of Energy (DOE), the Environmental Protection Agency (EPA), the Department of Defense (DOD), and the Federal Aviation Administration (FAA). In addition to its member universities, UCAR has formal relationships with approximately 100 additional undergraduate and graduate schools including several historically black and minority-serving institutions and 38 international universities and laboratories.

We appreciate the opportunity to submit written testimony and urge the Committee to support the President's request of $4.57 billion for the National Science Foundation (NSF) for fiscal year 2001, a 17.3 percent (or $675 million) increase over fiscal year 2000. Scientific advances and educational programs funded by NSF for 50 years have played an instrumental role in fueling the vibrant economy that makes the U.S. the strongest country in the world. In this time of great prosperity, it is fitting that the country invest in NSF programs with the largest budget increase ever proposed in the agency's history. This new funding will strengthen core research programs after many years of relatively flat or decreased funding, in addition to giving impetus to major new and ongoing initiatives that will pave the way for tomorrow's scientific discoveries and technological progress.

Within the NSF, we would like to provide testimony on the following specific programs:

RESEARCH AND RELATED ACTIVITIES (R&RA)

We urge the Committee to support the President's request of $3.54 billion in fiscal year 2001 for Research and Related Activities. This is a 19.7 percent increase over the fiscal year 2000 budget of $2.95 billion. The research community clearly has the capacity to support this level of research. Currently, NSF funds only about one third of research proposals received. Many that have not been awarded because of insufficient funds are rated good to excellent through a competitive, merit review process. The fiscal year 2001 increase will ensure that more excellent proposals are funded. Approximately half of the R&RA increase represents a long-awaited investment in the core research funded through NSF's scientific directorates. R&RA supports a broad range of scientific inquiry that is critical to the long-term vitality of this country. The proposed R&RA budget reflects NSF's commitment to the strategic goals of investing in Ideas, People and Tools, the three cornerstones of scientific research achievement, education and opportunity for all citizens, and technological advancement.

Geosciences (GEO) directorate

We urge the Committee to support the President's fiscal year 2001 budget request of $583.00 million for NSF's Geosciences Directorate. This is a 19.5 percent increase over the fiscal year 2000 budget of $487.79 million. GEO is the principal source of funding for university-based research in the atmospheric, earth and ocean sciences. Its activities address the nation's ability to understand, predict and respond to environmental events and changes. Through involvement in such interagency programs as the U.S. Weather Research Program (USWRP), the National Space Weather Program, and the U.S. Global Change Research Program (USGCRP), GEO research ad-

vances our ability to predict natural phenomena such as severe storms, solar variability, and climate patterns that impact society.

Atmospheric sciences (ATM)

We urge the Committee to support the President's fiscal year 2001 budget of $118.26 million for Atmospheric Sciences Research Support within the overall Atmospheric Sciences program of the Geosciences Directorate. This is a 23.2 percent increase over the fiscal year 2000 amount of $95.96 million. This ATM activity funds university research that advances our understanding of the Earth's atmosphere and its interactions with the Sun. As our ability has increased to do more complex research on solar-terrestrial interactions and the interactions of the earth's systems, so has the cost of necessary research tools such as computation time and instrumentation. For several years, the ATM Research Support allocation has been essentially flat. The fiscal year 2001 increase will make up for some of the ground lost to inflation and escalating costs, support ongoing research programs, allow development of new models to improve predictions of atmospheric and Earth system processes, and will enable researchers to further examine biogeochemical cycles as well as human impacts on weather and climate.

National center for atmospheric research (NCAR)

Within ATM, we urge the Committee to support the proposed fiscal year 2001 budget of $75.75 million for the National Center for Atmospheric Research. This is a 10.0 percent increase over the fiscal year 2000 budget of $68.85 million. This world-class center for atmospheric research supports the entire atmospheric sciences community and part of the ocean sciences community through observational and computer facilities, instrumented research aircraft, and an extensive visiting scientist program. In fiscal year 2000, more than 1,500 researchers and students will use the NCAR facilities and approximately 150 visiting scientists will stay for extended periods. In fiscal year 2001, NCAR will continue the badly needed refurbishment of the NCAR Mesa Laboratory building at a level of up to $4.0 million. This $12 million, multi-year refurbishment was begun in fiscal year 1999 and will ensure that NCAR's primary building will continue to serve the scientific community at the highest level.

Also within the GEO budget, we appreciate the funding being allocated for Education and Training, including the digital libraries initiative and the augmentation for undergraduate and K–12 activities. We would also like to point out the UCAR program, Significant Opportunities in Atmospheric Research and Science (SOARS). SOARS, funded directly by ATM within GEO, is having a positive impact on the number of ethnically diverse atmospheric sciences graduate students through its model mentoring approach and research orientation. It is an excellent example of NSF's implementation of the cross-cutting initiative, the 21st Century Workforce.

While it is not delineated in the President's budget, we would like to call the attention of the Committee to the great potential for ATM contributions to the National Space Weather Program, specifically through the ATM Upper Atmosphere Research section. The interagency National Space Weather Program is pursuing research that can help us to understand and mitigate the sometimes negative societal effects of solar variability. A future enhanced role for the Upper Atmosphere Research program has the potential to make great advances in areas such as enhanced understanding of the Sun's magnetic activity (the source of space weather) and of the impacts of solar activity on the terrestrial atmosphere and the near-earth environment. We look forward to the continued excellent contributions of this NSF program to this national effort.

Computer and information science and engineering (CISE)

We urge the Committee to support the President's request of $529.10 million for NSF's Computer and Information Science and Engineering program. This request includes $190.0 million as part of NSF's Information Technology initiative and is a 36.2 percent increase over the fiscal year 2000 budget of $388.42 million. CISE computer science research has contributed to advances in computers, software, and computer use that have benefited almost every academic discipline and revolutionized the manner in which much research is conducted. CISE also provides advanced computing and networking capabilities needed by academic researchers for leading research in all science and engineering fields. In the field of the atmospheric sciences, weather and climate research require extremely complex information technology tools. By focusing on these areas as an interdisciplinary "grand challenge," the nation could advance information technology tools while helping to better understand and predict the impact of weather and climate on society. We recommend such a focus to the CISE effort.

MAJOR RESEARCH EQUIPMENT (MRE) PROGRAMS

Earthscope

Within the Major Research Equipment account, we urge the Committee to support the President's request of $17.44 million to begin construction of Earthscope. This geophysical instrument array will allow scientists to make major advances in our knowledge and understanding of the North American continent. The initial Earthscope activity, deployment of high-capability seismometers throughout the United States, will improve our resolution of the subsurface structure and lead to advances in understanding fault conditions and the rupture processes of earthquakes.

Terascale Computing Systems

As part of the Information Technology Research Initiative included within the MRE account, we urge the Committee to support the President's request of $45.0 million for Terascale Computing Systems that will enable U.S. researchers to gain access to leading edge computing capabilities. Our nation lags behind other developed nations in high-end computing, a situation that has already adversely affected the atmospheric science community's ability to run the complex models necessary to understand and predict regional and global climate change. As the atmospheric sciences community strives to learn more about the effects of solar variability on the earth's atmosphere, space weather that impacts satellite communications, climate variability and weather patterns, the need for computational power exceeds capacity. Any advance in computing capacity will return significant scientific advancements in many fields. In the atmospheric sciences, ITR promises advances in atmospheric modeling that will enable us to effectively address many of our nation's weather and climate policy issues. As was mentioned above, weather and climate is an excellent "grand challenge" area for this effort.

High-performance instrumented airborne platform for environmental research (HIAPER)

While we support the great advances in science and technology that all of the MRE funded programs represent, we were disappointed as a community to learn that the High-performance Instrumented Airborne Platform for Environmental Research was not included in the fiscal year 2001 budget request. Funding for this modern research aircraft was begun by Congress in fiscal year 2000 following approval of the program by the National Science Board. Since at least one other aircraft currently in service at NSF will end its useful lifetime in the next four years, we sincerely hope that funding for this project is continued. We look forward to its completion in the next four years and to its vital contribution to our understanding of how severe weather and other climate phenomena develop and impact the nation and the globe.

Education and human resources (EHR)

We urge the Committee to support the President's request of $729.01 million in fiscal year 2001 for Education and Human Resources. This is a 5.5 percent increase over the fiscal year 2000 amount of $690.87 million. NSF's EHR activities are playing a critical role in creating science, mathematics and engineering education opportunities for this country's K–12 youth and teachers, undergraduates and faculty members, graduates and post-doctorates, and the general public. EHR is also assuming a leadership role in NSF's 21st Century Workforce efforts to produce a diverse, internationally competitive workforce to meet the challenges of this new century.

We urge the Committee to support the President's request of $27.0 million for the National SMETE Digital Library (NSDL) within the EHR. This is an 80 percent increase over the fiscal year 2000 budget of $15 million. The NSDL long-term goal is to produce a digital library of high-quality, reviewed educational materials at all levels in science, mathematics, engineering and technological education (SMETE). This research, teaching and learning resource is being developed in response to needs articulated by the academic community and corporate leaders. NSDL presents a tremendous opportunity to improve access to superior instructional materials and advanced classroom technologies.

U.S. GLOBAL CHANGE RESEARCH PROGRAM

We urge the Committee to support the fiscal year 2000 proposed budget of $187 million for the U.S. Global Change Research Program (USGCRP) within NSF. This is level with the fiscal year 2000 budgeted amount. The USGCRP is an interagency program that addresses interactions among physical, biological, ecological, and

human systems at various scales. Working with national and international research institutions, this program allows the atmospheric sciences community to improve prediction capabilities for climate fluctuations between excessively wet and dry periods, and for long-term climate change. This research is a critical investment for the future of this nation, its economy, and the health and safety of its citizens.

SPECIAL INITIATIVES

Information Technology Research (ITR)

We urge the Committee to support the President's request of $326.91 million for Information Technology Research and support the NSF in its role as leader of this multi-agency initiative. This investment will produce tools and capabilities that should benefit all scientific fields and much of society in the next several years. ITR promises innovations that will provide efficiencies in the way university researchers process and access data, communicate with collaborators, and share research results. Given the enormous earth systems and solar-terrestrial data sets that are critical to atmospheric sciences research, it is likely that the ITR effort will advance our field of science through innovative processing, archiving, and networking methods which we have not yet imagined. Our nation can advance both information technology and improvements in weather and climate prediction by focusing on the atmospheric sciences as a "grand challenge" for this effort. Advancing computation tools for weather and climate will serve the nation through improved prediction capabilities and result in significant advances in information technology.

Biocomplexity in the environment (BE)

We urge the Committee to support the President's request of $136.31 million for Biocomplexity in the Environment. This interdisciplinary initiative will advance our ability to understand the complex systems that are structured or influenced by living organisms and the interactions within biological systems and physical processes. We hope that BE efforts will lead eventually to enhanced predictability of environmental systems, including climate, that will assist environmental decision makers.

Nanoscale science and engineering

We urge the Committee to support the President's request of $216.65 million for Nanoscale Science and Engineering. Nanotechnology promises to revolutionize our control of matter in areas such as information technology and to change the way in which most products are made. We look forward to the manner in which it promises to advance research in the field of the atmospheric sciences, particularly through possible major breakthroughs in the development of new capabilities involving technologies such as computers, radars, and satellites.

21st Century Workforce

We urge the Committee to support the President's request of $157.05 million for the 21st Century Workforce. In order to remain a global leader in most scientific fields and competitive in all areas, we must offer the opportunity for all of our citizens to increase their understanding of science, mathematics, and technology and to meet the challenges of the dramatic global transition to a technology-literate workforce. The SOARS program mentioned above is a good example of a highly successful effort to broaden involvement in the sciences. The 21st Century Workforce is an important focus that could help to enhance effective programs such as SOARS.

Conclusion

The proposed budget meets the challenges of a new millennium by enabling NSF to invest appropriately in this country's research infrastructure, support both experienced and promising investigators, provide opportunities for our nations' diverse student population, advance the technological capacity that drives much of our economy, and inform our citizens of our scientific accomplishments and related global issues. We are pleased and proud that an agency that provides such critical services for the nation may begin its second fifty years with the endorsement of appropriately increased funding.

On behalf of the UCAR community, I want to thank the Committee for the important work you do for U.S. scientific research, education, and training. We appreciate your attention to the recommendations of our community concerning the fiscal year 2001 budget of the National Science Foundation.

PREPARED STATEMENT OF THE UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH (UCAR)

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 U.S. Senate Committee on Appropriations, Subcommittee on VA, HUD and Independent Agencies.

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 National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration (NOAA), the Department of Energy (DOE), the Environmental Protection Agency (EPA), the Department of Defense (DOD), and the Federal Aviation Administration (FAA). In addition to its member universities, UCAR has formal relationships with approximately 100 additional undergraduate and graduate schools including several historically black and minority-serving institutions and 38 international universities and laboratories.

We appreciate the opportunity to submit the following written testimony on the proposed fiscal year 2001 budgets for the National Aeronautics and Space Administration (NASA):

SPACE SCIENCE ENTERPRISE

We urge the Committee to support the fiscal year 2001 President's request of $2.398 billion for NASA's Space Science Enterprise. This is a much needed nine percent increase over the fiscal year 2000 funding level. The extraordinary mission of the Office of Space Science, to solve mysteries of the Universe, explore the Solar System, discover planets around other stars, understand the behavior of the Sun, and search for life beyond Earth, is of great interest to the public as well as the academic community. These challenges will form the basis of the country's space science program over the next several decades.

Astronomical search for origins

We urge you to support or exceed the President's fiscal year 2001 request of $133.2 million for Astronomical Search for Origins, a program that resides in Supporting Research and Technology within the Space Science Enterprise. The proposed amount reflects an increase of only 1.5 percent over the fiscal year 2000 funding level. Astronomical Search for Origins funds Origins of Solar Systems, a grant program that supports university and laboratory researchers pursuing scientific investigations related to understanding the formation and early evolution of planetary systems. Over the past five years, interest in this area of research has exploded with excellent proposals far exceeding the funds available. Examples of key research questions to be addressed include: What is the frequency of the occurrence of planetary systems? What are the conditions of star formation? What determined the masses of giant planets? An example of the potential of the Origins program is the recent discovery by funded principal investigators of several planets orbiting a Sun-like star. This was the first time a multi-planetary system was found outside our own solar system. There are innumerable such discoveries still to be made.

Sun-Earth connections (SEC)

Within the program titled Supporting Research and Technology in the Space Science Enterprise, we urge the Committee to support the fiscal year 2001 President's request of $78.0 million for the Focused Program, Sun-Earth Connections. This is an increase of $51.4 million over the fiscal year 2000 funding level. SEC's goal is to understand the changing Sun and its effects on the Solar System, life and society. The domain of study includes solar processes and the interaction of solar plasma and radiation with Earth and other planets. The technology developed within this program is of extreme importance in protecting communication satellites and the lives of astronauts working in space.

Planning and technology activities of the Sun-Earth Connections mission include the following programs of importance to our understanding of the influences of the Sun on earth and humanity:

Living with a star (LWS)

We urge the Committee to support the fiscal year 2001 President's request of $20 million to begin the new, cross-cutting initiative, Living With a Star. This new program will undertake the most comprehensive study to date of the Sun and its interactions with the Earth. Deployment of a new network of spacecraft and enhancements to current solar variability programs will help us to understand the Sun's impacts on the Earth and the space environment. Data gathered will be of particular interest to solar physicists working on issues of solar variability and in the relatively new field of space weather, and to climate scientists working to understand the complexity of the Earth's climate system. We support NASA's concerted effort to make LWS a multi-agency program. Given the tremendous importance of understanding and predicting solar variability and its impacts on the terrestrial climate, communications, humans in high-altitude aircraft, GPS signals, electric power grids, human space flight, etc., agencies with related interests should be involved.

Thermosphere, ionosphere, mesosphere energetics and dynamics (TIMED)

TIMED is a small, remote sensing and imaging spacecraft that is the first science mission in the planned programs of Solar Terrestrial Probes (STP). TIMED instruments are being developed for NASA by several U.S. research universities. The overall scientific goals of the mission are to perform the first focused exploration of the upper atmosphere between 50 and 200 kilometers above Earth in order to gather and analyze data concerning the energy and dynamics of this very important solar-terrestrial transition region. Through the mission we will gain a more detailed understanding of the role of the region in the transport of chemicals that influence climate change as well as a better understanding of space weather variables that impact spacecraft, astronauts in space, and communications.

TIMED was scheduled to be launched this May aboard a Delta II launch vehicle with JASON, a French satellite that is unable to meet the launch date. Launch will be delayed by up to one year presenting a very serious funding issue for the fully developed American satellite. We hope that the Committee will work to help NASA resolve this fiscal year 2001 funding problem.

Solar-B

Within the Solar Terrestrial Probes (STP) area of the Sun-Earth Connections program, we urge the Committee to support the fiscal year 2001 President's request of $19.5 million for the Solar-B program. This is $9.9 million above the funding level for fiscal year 2000 and represents increased activity in preparation for the Solar-B launch in fiscal year 2004. Solar-B is a joint mission with the Japanese to carry out highly focused studies of the Sun and its many influences on the Earth and other planets. The mission consists of instrumentation that will advance knowledge of the interaction between the Sun's magnetic field and its high-temperature, outer atmosphere. The data gathered should help us understand events such as solar mass ejections that can endanger astronauts in orbit and hit Earth's atmosphere with enough force to cause expensive communications disruptions.

EARTH SCIENCE ENTERPRISE (ESE)

We urge the Committee to support the fiscal year 2001 President's request of $1.406 billion for NASA's Earth Science Program. This amount is a reduction of $37.6 million from the fiscal year 2000 actual funding level. While restructuring within the ESE budget makes it difficult for us to analyze, we understand that some of the reduction can be attributed to the Earth Observing System (EOS) having reached its peak of development. While this is understandable, we want to emphasize the importance of ESE, the goal of which is to understand the total Earth system and the effects of humans on the global environment. The observations, research and technology provided through ESE help us to discover patterns in terrestrial climate which enable us to predict environmental events such as floods and severe winters. Scientific results achieved using NASA's vantage point of space include reduced uncertainty in measuring rainfall over the tropics, determination of thickening and thinning rates for the Greenland ice sheet, and enhanced understanding of the role of vegetation in removing carbon dioxide from the atmosphere. This work is critical to our development of sound science and sound global environmental policy.

Within the Earth Science Enterprise, we would like to comment on the following programs:

Earth observing system (EOS)

We urge the Committee to support the fiscal year 2001 President's request of $447.1 million for the Earth Observing System, the centerpiece of the Earth Science Enterprise. This amount represents a newly structured budget so is difficult to compare with fiscal year 2000 figures. EOS is a program of multiple spacecraft, technology, and interdisciplinary scientific investigations that provide data critical to our understanding of global climate change. The request will allow NASA to proceed with the launching of the Aqua satellite, which will provide highly accurate atmospheric temperature and humidity measurements necessary for improved climate change research. Other EOS satellites will provide for improved measurements of ice sheet topography, and of ocean wind velocity.

EOS chemistry mission (CHEM)

We urge the Committee to support the proposed fiscal year 2001 President's request of $110.3 million for the EOS Chemistry Mission within NASA's Earth Science Enterprise. This appears to be a decrease in funds from the fiscal year 2000 amount of $124.7 million for this mission that focuses on the impact of greenhouse gases on the global climate. As CHEM nears launch, the testing and calibration of instruments is crucial to ensure a successful mission. Therefore, we do not fully understand the proposed decrease in funding and are concerned given the stage of mission development and CHEM's importance to scientific, social, and policy issues.

The CHEM objective is to study the chemistry and dynamics of the Earth's atmosphere from the ground through the mesosphere for the purpose of answering critical questions such as: Is the Earth's upper atmosphere ozone layer recovering? Is air quality in the Earth's lower atmosphere deteriorating? How is the Earth's climate changing? The processing and assimilation of the data that hold the answers to these questions reside with the EOS Data Information Systems (EOSDIS). As stated below, to make the CHEM mission yield all possible scientific results, the EOSDIS budget must be able to support making the CHEM data available and useful to researchers.

EOS data information systems (EOSDIS)

We urge the Committee to support the fiscal year 2001 President's request of $252.0 million for the EOS Data Information System. This number appears to be almost $10 million below fiscal year 2000. Again, we have questions concerning the efficacy of a reduction in budget given the importance of the EOSDIS work. EOSDIS ensures that data from Earth Science missions are captured, processed into useful information, broadly distributed, and archived for future use. These data are critical to our understanding of global climate change and are of great importance to the atmospheric sciences community of researchers. Cuts in the EOSDIS program that could jeopardize the processing of data concern us because they put at risk mission research results. For example, if EOSDIS lacks sufficient funding to process data from CHEM instrument programs (see above), then the use of data for research analysis will be delayed rendering the mission of far less immediate value than intended originally. The country has made a wise, major investment in gathering these data. Access to them should not be minimized or compromised by cutting budget corners.

EOS follow-on

We urge the Committee to support the fiscal year 2001 President's request of $120.6 million for EOS Follow-On. This is a $96.2 million increase from the fiscal year 2000 amount of $24.4 million. The EOS Follow-On account provides funding for initiation of the science implementation plan (now under development) that will drive the selection of future EOS missions. EOS Follow-On will support the development and testing of new technologies that will support future missions and help reach the objectives of the implementation plan. While the Earth Science Enterprise is launching several missions over the next three years, work will need to proceed in fiscal year 2001 to define post-fiscal year 2002 efforts that will ensure future readiness for the next series of launches. Planned effectively, this next series will complement and enhance the results of the first series and contribute to the achievement of the long range goals of the science implementation plan. The future of EOS and Earth Science Enterprise missions resides with this Follow-On work.

AERO-SPACE TECHNOLOGY ENTERPRISE

Aviation safety program

We urge the Committee to support the fiscal year 2001 President's request of $70.0 million for the Aviation Safety Program (AvSP) that resides within NASA's Aero-Space Technology Enterprise. This is an increase of $5.6 million over the fiscal

year 2000 amount of $64.4 million. The world-wide demand for air travel is expected to more than double in less than two decades. If the current accident rate remains stable, the increased traffic volume could result in approximately one major accident per week. This issue is addressed by AvSP the goal of which is to develop and demonstrate technologies that contribute to a reduction in aviation accident and fatality rates by a factor of five by the year 2007.

According to the National Transportation Safety Board, approximately 35 percent of aviation fatalities occur in weather-related accidents. The AvSP program, Weather Accident Prevention (WxAP), develops and supports the implementation of technologies to reduce fatal aviation accidents caused by weather hazards. NCAR's Research Applications Program is supported through WxAP in its efforts to disseminate weather information directly to pilots as they fly; and in its computer modeling research to detect, characterize, and forecast turbulence, and to mitigate the damaging and sometimes fatal effects of severe turbulence. We urge the Committee to support full funding for Weather Accident Prevention within NASA's Aviation Safety Program.

On behalf of the UCAR community, I want to thank the Committee for the important work you do for U.S. scientific research, education, and training. We appreciate your attention to the recommendations of our community concerning the fiscal year 2001 budget for NASA.

PREPARED STATEMENT OF THE UNIVERSITY OF MARYLAND

Thank you for the opportunity to address the House VA, HUD, and Independent Agencies Appropriations Subcommittee. I represent the Space Science Working Group (SSWG) of the Association of American Universities, whose members include several hundred space scientists at approximately fifty universities nationwide. SSWG scientists work in all three NASA science areas (Office of Space Sciences, OSS; Earth Science Enterprise, ESE; Office of Life and Microgravity Sciences and Applications, OLMSA), building instruments for NASA missions, carrying out experimental and theoretical investigations, and bringing hands-on experience of exciting NASA science to graduate and undergraduate students.

This past year saw the successful initiation of a number of missions, spanning the range from the Chandra and Terra observatories to middle and small size missions such as IMAGE, FUSE, SWAS, and QuikSCAT. More important for the science community and public has been the harvest of new views of our universe, from the striking Chandra X-ray pictures of gigantic stellar explosions, to the seismic probing of our Sun's interior by SOHO, and, most recently, the near-science fiction close-up pictures of an asteroid being orbited by the NEAR deep space probe.

Along with these successes has been a string of painful mission failures, especially in the Mars program. Difficult as these have been for NASA as an agency, we point out also the tremendous loss these failures impart on scientists who have spent years on their space experiments only to have the payoff of knowledge denied. NASA is unflinchingly studying these failures, has commissioned excellent groups (the Young, Stephenson, and Spear panels) to study both the hardware and management issues involved, and is already taking specific, and sensible actions get the program back on track. Overall, the approach being taken is to fine-tune the system, rather than embark on a totally new approach. We believe this is the right strategy.

After a number of years of flat or declining budgets, the fiscal year 2001 budget proposal shows significant growth for NASA, which is continued in the 5-year projected plan. We believe that this signal of support is appropriate for the NASA science offices that are carrying out world-class science programs with missions costing a fraction of the estimates of a decade ago. We support this proposed budget and urge you to approve it. Of special importance in the proposed budget are:

—several new science initiatives, particularly "Living with a Star", along with some smaller, but especially important programs,
—orderly implementation of missions already underway, and
—shoring up of the Mars program with additional resources.

Areas of concern to us include:

—continuing erosion of the Research & Analysis and Data Analysis funds, and
—International Traffic in Arms Regulations (ITAR).

OFFICE OF SPACE SCIENCE (OSS)

Strategic planning and peer review

The fiscal year 2001 OSS budget shows approximately 10 percent growth over the prior year, with a plan for further increases in the 5-year plan. The tremendous scientific successes in the Office of Space Science have been the result of a strategic

planning process that extracts the best ideas from the nation's space scientists, and coordinates them into a compelling program that seeks to understand the universe, and our place in it. Large amounts of media coverage show that the public, as well as the scientist, share the interest and excitement of this research. OSS selects the best peer-reviewed proposals to carry out its plan. This past year OSS completed its triennial update of its strategic plan, adjusting it to take account of recent discoveries. The new plan is excellent, and we strongly support its implementation.

New initiatives

The major initiative in the fiscal year 2001 budget is the "Living with a Star" program, a multi-year effort to carry out research to understand solar activity and its impact on Earth. In recent years the SOHO observatory has peered into the Sun's interior using seismic waves, giving previously unimaginable insights into the complex subsurface motions of the plasma. These subsurface motions stress huge magnetic loops that poke far above the Sun's surface; the stresses occasionally cause the loops to rupture, releasing enormous amounts of energy and pushing solar material into space at one to two million miles per hour. A fleet of other spacecraft has observed these ejecta, tracked them as they move outwards, and measured the effects of the ones that collide with the Earth's magnetic shield causing electrical disruptions on spacecraft and ground systems. While we can describe this sequence of events, we don't understand the science. Living with a Star addresses this issue by observing the Sun from all directions and globally monitoring the effect of solar explosions on the Earth, which, coupled with a vigorous theoretical program will make it possible to piece the puzzle together. This will set the stage for longer term warnings of solar variability and explosive events that can affect terrestrial power and communication systems, as well as civilian and military space assets.

Another new initiative of special interest and impact in the university community is the Discovery Micromissions, smaller versions of the highly successful Discovery series patterned on the Small Explorer program. Launched by piggy-back rides, this innovative line promises to encourage new ways to explore the solar system in an especially cost-effective manner.

Research and analysis

We wish to underscore the role of the Research and Analysis (R&A) and Suborbital program lines of the NASA budget in seeding the scientific vitality of the agency. Largely in the form of small grants to academic institutions, these efforts build upon the results of completed missions, and lay the groundwork for future mission concepts. They are also the sole means by which young researchers can enter space science research. Including laboratory studies, theory, and ground-based observations, this work allows the agency to strengthen the science framework around which missions are designed.

Indeed key technologies for space missions are routinely pioneered in the R&A and suborbital program where high risk ventures are possible. Key detector elements in the Chandra and SOHO observatories, for example, were incubated in the suborbital program. While not explicitly connected with individual missions, this work helps us creatively conceptualize new missions. In this way, the R&A effort works towards long range goals in the agency strategic plans.

A notable strength of the NASA R&A effort is that the individual pieces are small and flexible enough that they can be less schedule-driven than major missions, and more accommodating toward science goals. They also provide opportunity for student involvement and ownership in pursuits that lead to future missions. Peer reviews, fierce competition, and short grant duration all combine to guarantee that the selected programs are regularly "scrubbed" for content, and efficiently executed.

In recent years, the R&A line has suffered significant erosion, sapping the strength of the future program. We urge an increase in the R&A line to offset past losses, followed by inflationary increases in future years.

Failure of CSOC to achieve savings in mission operations

In the early and mid 1990s, NASA management began a vigorous effort to cut the costs of operating its flying missions, both to achieve greater efficiency, and to allow handling of the anticipated much larger number of small missions in its new mode of research. Very significant savings were achieved. In January 1999 the agency implemented the Consolidated Space Operations Contract (CSOC) in an attempt to further reduce operations costs. While missions have been flown safely under CSOC, the cost savings have not materialized, and indeed all indications are that costs will in fact increase under CSOC. This is a grave issue for the science community, since these increased costs are expected to impact the support available for analysis of data from the missions, thereby directly reducing the science payoff from our program.

EARTH SCIENCE ENTERPRISE (ESE)

The ESE budget proposal for fiscal year 2001 is essentially level due to normal rampdown of hardware development projects that are complete, or are nearing completion. This past year, the launch of Landsat 7 and the flagship Terra mission together with the implementation of EOSDIS has placed us on the threshold of a new era in the Earth studies. There were also a number of smaller missions launched, notably the rapidly-developed QuikSCAT to measure winds over the ocean. The program in the fiscal year 2001 budget includes launch of the 2nd EOS flagship mission, Aqua, later this year, and provides for continued orderly implementation of the EOS program with the Chem mission (2002 launch), and a number of smaller missions.

We especially applaud the $120.4 million Earth Probe series; this is a line of small, rapid development missions that can provide crucial flexibility and quick-response studies that cannot be accommodated on the flagship missions.

As is the case in the Office of Space Science, inadequate funding of the R& A components of the Earth Science program continue. In addition, this already strained program is serving as a source of revenue to solve some other budgetary problems in the ESE. We urge that ESE R&A program be strengthened, and shielded from undermining by damaging budgetary raids.

LIFE AND MICROGRAVITY SCIENCE AND APPLICATIONS (OLMSA)

The fiscal year 2001 proposal for OLMSA shows a 10 percent increase over fiscal year 2000, which should help provide relief for a seriously beleaguered science program. In recent years the OLMSA science program has been decimated by slips in the Space Station schedule that have opened an ever-widening gap between the last planned OLMSA Shuttle missions and the initiation of research on the Space Station. With no planned missions in this gap, the OLMSA science community was grounded at the very time its flight research program should have been strengthened in preparation for Space Station. The program has nevertheless achieved some commendable goals, for example, in the efforts to transfer space-based human support technology program developments to the commercial agricultural and environmental business.

Additionally, we are heartened by the agency proposal to add an OLMSA research mission in early fiscal year 2002, and to increase mid-deck locker opportunities for this community. We appreciate Congressional support in this area. Only by strengthening the OLMSA community do we keep alive our prospects of reaping much of the promise of Space Station research. We commend plans in the proposed budget for initiating limited research on the Space Station, and urge that this effort be initiated at the earliest possible time, sustained, and broadened as construction of the Space Station allows.

GENERAL ISSUES

Space grant colleges

The SSWG has often pointed out the important outreach role space science research plays. A glance at news media, educational TV, or the crowds at the Air and Space Museum makes it clear that this high technology adventure engages young and old alike. Probably more than any other area of modern research, space science has the capacity to interest young people in the hard questions of research, and to focus their interests into pursuing technical studies in school that prepare them for workplace of tomorrow. The Space Grant College system has played an important and successful role in this outreach to elementary and secondary school students, but its budget has lagged in recent years. We point out that matching funds result in excellent leverage in this program, and we applaud the agency's proposal for a $5.6 million increase in Space Grant.

International traffic in arms regulations (ITAR)

A major issue that has recently surfaced in space science research is the impact of the ITAR. These regulations have been subject to increasingly tight interpretation in the past months, with probably unintended yet nevertheless dire implications for space science research. Science is an international activity in general, and space science in particular has long thrived through collaboration with foreign-born colleagues. Under current interpretations of ITAR, however, foreign colleagues are being barred from discussions of plans for missions on which they are flying experiments, and university researchers with foreign collaborators are scrambling to get advice from their Deans regarding rules for licenses and registration of their universities as Munitions Manufacturers.

These restrictions on scientists carrying out unclassified research on civilian spacecraft do not serve any useful national security purpose. Carrying out spaceflight missions is a difficult task for researchers in and of itself; carrying out this activity in a thicket of legal restrictions with threats of huge personal fines is impossible. It will shut off collaboration with our foreign colleagues, causing U.S. researchers to "go it alone" in space research, to everyone's loss. We understand that the Space Studies Board at the National Academy of Sciences has expressed concern about this issue, and is considering convening a government and university forum on the topic. While recognizing that ITAR is not a budget issue, we nevertheless ask for your support in clarifying that these ITAR restricitons are not applicable to civilian, unclassified, fundamental space science research. Thank you for your attention to these matters.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

AGENCY FOR TOXIC SUBSTANCE AND DISEASE REGISTRY

PREPARED STATEMENT OF THE ASSOCIATION OF MINORITY HEALTH PROFESSIONS SCHOOLS

Mr. Chairman, thank you for the opportunity to express the views of the Association of Minority Health Professions Schools (AMHPS).

I am Ronny B. Lancaster, M.B.A., J.D., Senior Vice President for Management and Policy at the Morehouse School of Medicine, and President of the Association of Minority Health Professions Schools. AMHPS is an organization which represents twelve (12) historically black health professions schools in the country. Combined, our institutions have graduated 60 percent of the nation's African-American pharmacists, 50 percent of the African-American physicians and dentists, and 75 percent of the African-American veterinarians, indeed a significant number of minority health professionals in this country.

The AMHPS institutions have also educated a disproportionate share of the small number of African-Americans receiving doctorates in the biomedical and other sciences. According to the Department of Education, of the 4,645 PhDs awarded in the biological and life sciences in the 1994–1995 school year, only 87 PhDs were granted to African-Americans; and in the health professions and related sciences among the total 2,069 degrees conferred, only 90 were awarded to African-Americans. The majority of these degrees were granted by Historically Black Colleges and Universities. In 1989 over 23 percent of the doctoral degrees awarded to African-Americans were by Meharry Medical College. Since 1975, over 10 percent of all doctorates in the biomedical sciences awarded to African-Americans have been awarded by Meharry's School of Graduate Studies. In 1995, Meharry Medical College graduated 6 PhDs in pharmacology and 1 PhD in medicinal chemistry. The numbers may seem small, but they are a significant representation of the contributions made by our institutions to the education of African-Americans at the graduate level in the biomedical sciences.

AMHPS has two major goals (1) to improve the health status of all Americans, especially African-Americans and other minorities; and (2) to improve the representation of African-Americans and other minorities in the health professions. We are working toward achieving this goal by seeking to strengthen our institutions and fortify other programs throughout the nation that will improve the role of minorities in the provision of health care and research.

THE AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

Congress created ATSDR to implement the health-related sections of law that protect the public from hazardous wastes and environmental spills of hazardous substances. The mission of ATSDR is to prevent exposure and adverse human health effects and diminished quality of life associated with exposure to hazardous substances from waste sites, unplanned releases, and other sources of pollution present in the environment.

In June 1985, ATSDR was formally organized to begin, in conjunction with the Environmental Protection Agency (EPA), the Centers for Disease Control (CDC), (now the Centers for Disease Control and Prevention), and the National Institute of Environmental Health Sciences (NIEHS), addressing the mandates of CERCLA, one of the most challenging and innovative environmental laws relating to public health.

Following the 1986 reauthorization of Superfund under the Superfund Amendments and Reauthorization Act (SARA), the Agency received major new mandates.

SARA directed that ATSDR, in cooperation with the EPA, prepare a list of the substances most commonly found at waste sites on the National Priorities List. ATSDR was also directed to prepare toxicological profiles for each of the substances on that list, and to examine, summarize, and interpret the human health significance of the scientific data available for these substances. In cooperation with the National Toxicology Program (NTP) and EPA, ATSDR was also required to initiate research to fill key data needs identified in the substance-specific toxicological profiles. This research was primarily to improve the information base needed to assess the health concerns of people exposed to hazardous substances. SARA also broadened ATSDR's responsibilities in the areas of public health assessments, establishment and maintenance of toxicologic databases, information dissemination, and medical education.

In 1992, ATSDR identified 117 priority data needs for 38 hazardous substances. A significant portion of these key data needs have been referred to EPA to be filled under the Toxic Substances Control Act authorities. Some data gaps will be filled voluntarily by private industry through agreements with ATSDR, and some key human health research needs will be filled by research mandated by the Great Lakes Critical Programs Act.

Key data gaps are also being filled with funding from ATSDR through the research cooperative agreement with the Minority Health Professions Foundation (MHPF). As directed by Congress, these resources support research conducted by academic institutions in the Association of Minority Health Professions Schools (AMHPS). The substance-specific investigations being conducted by AMHPS institutions will improve the knowledge base necessary to understand the linkage between exposure to hazardous substances and human health as well as reduce the uncertainties of public health assessments.

Mr. Chairman, the administration's budget proposal for fiscal year 2001 of $64 million would severely cripple ATSDR's ability to carry out its important activities. AMHPS recommends an appropriation of at least $70 million for ATSDR in fiscal year 2001, which is the current funding level.

THE ATSDR/AMHPS COOPERATIVE AGREEMENT ON ENVIRONMENTAL HEALTH AND TOXICOLOGY RESEARCH

AMHPS is recommending a fiscal year 2001 funding level of $4 million for the ATSDR/MHPF Cooperative Agreement on Environmental Health and Toxicology Research. The important work being conducted through this cooperative agreement has real life implications that urgently need to be addressed. For example, the National Health and Nutrition Examination Survey data indicates that lead poisoning impacts poor children at eight times the rate of non-poor children, and that African-American children living in pre–1946 constructed housing suffer a lead poisoning rate of nearly 22 percent.

In partnership with ATSDR, the Minority Health Professions Foundation is engaged in numerous public health research activities designed to improve the health status of our nation's minority and medically underserved communities. These activities include:

—improving the scientific knowledge base for substance-specific risk assessments.
—improving the knowledge base for ATSDR public health assessments.
—addressing community health concerns in medically underserved communities.
—promoting community education and outreach in these areas.
—advancing state-of-the-art science at minority institutions.

In addition to the specific issues outlined above, this cooperative agreement is serving as a national model for collaboration between a federal agency and institutions with varying degrees of expertise at diverse locations. We have indeed been able to direct the cooperative agreement's limited resources to the institution with the greatest ability to study a problem and offer a potential intervention strategy. Collectively, we are much stronger than our individual institutions and together MHPF and ATSDR have consistently shown an ability to apply our varying degrees of expertise in the most efficient manner.

Mr. Chairman, we are very proud of the accomplishments of this program and encourage the subcommittee to support both ATSDR overall and the ATSDR/MHPF cooperative agreement at the recommended levels. Thank you very much for the opportunity to submit testimony.

SUMMARY POINTS

The Agency for Toxic Substances and Disease Registry (ATSDR) is performing critical work in the field of environmental and toxicological studies that has a profound impact on public health. In order to carry out the level of activity that is

called for in its mission statement, AMHPS recommends an appropriations of at least $70 million for ATSDR in fiscal year 2001, which is the current funding level.

The cooperative agreement that exists between the Minority Health Professions Foundation and ATSDR to address the consequences of exposure to hazardous substances among at-risk population groups in medically underserved communities is a public health and toxicology success story that deserves continued support by this subcommittee at a level of $4 million in fiscal year 2001.

CORPORATION FOR NATIONAL AND COMMUNITY SERVICE

PREPARED STATEMENT OF THE AMERICAN ASSOCIATION OF RETIRED PERSONS

AARP appreciates this opportunity to comment on funding next year for programs which affect the lives of low-income older Americans. We would also like to express our appreciation for the Subcommittee's past efforts in this regard. Given that poverty in old age is likely to be permanent, continued support of such programs—notably Section 202 Supportive Housing for the Elderly—remains essential. This support is needed now more than ever, in light of limitations on spending.

Our recommendations can be summarized as follows:

Secs. 202 and 811.—provide Administration's recommended increases for Section 202 Low Income Elderly Housing (from $710 million to $779 million) and Section 811 Housing for Disabled Persons (from $201 million to $210 million);

Alternatives for younger persons with disabilities.—make available to public housing authorities the resources necessary to develop and adapt alternatives to elderly housing for younger individuals with disabilities. Set aside at least 5,000 vouchers for persons with disabilities and target them to housing authorities most affected by "mixed population";

Housing Counseling.—provide Administration's recommended increase for Housing Counseling (from $15 million to $24 million), a program mandated to provide counseling to reverse mortgage consumers;

Supportive Services.—at a minimum, preserve $55 million earmark for public housing supportive services which funds Congregate Housing Services Program and service coordinators; and

Corporation for National and Community Service.—provide sufficient funds for the Corporation for National and Community Service.

GROWING NEED FOR ELDERLY HOUSING

The seismic growth in the nation's older population expected over the next fifty years presents formidable challenges to policymakers. By 2050, as many as one in five Americans will be elderly, with the population aged 65 and over having risen to a staggering 80 million. Households headed by those age 75 and over—the "oldest old"—represent the fastest growing segment of the older population. By 2010 they will account for nearly half of the growth of older Americans.

These demographic changes are significant to planning for the future housing needs of low-income older Americans, particularly regarding supportive services for the frail elderly. These individuals are much more likely to be living alone on meager incomes and to suffer from multiple chronic diseases. Meeting the challenge calls for reform of existing federal housing programs and collaboration with other agencies such as the Department of Health and Human Services.

The declining private market for affordable housing has increased the importance of federally subsidized housing for older renters with low incomes. According to analyses of American Housing Survey data, roughly one-fourth of the 5.2 million households receiving federal housing assistance are headed by older persons who occupy more than 1.4 million rental units. Most of this assistance comes through the Department of Housing and Urban Development. Despite the substantial portion of housing occupied by older persons, the Department has no office or personnel dedicated to developing a comprehensive housing policy for this population.

Two critical factors differentiate the housing needs of older persons from those who are younger. The first difference relates to physical environment. A program like HUD's Section 202 Supportive Housing for the Elderly is tailor made in this regard. Features include nonskid flooring, safety grab bars and wider doorways to accommodate wheelchairs.

The second difference is age-related in that older persons tend to remain longer in their homes. Many now in elderly housing are longtime residents who have simply "aged in place" with their communities. These older and frailer residents require increasingly intensive levels of personal assistance to remain independent. HUD reports that the average age of Section 202 Housing residents is 80 and will continue

to rise. Further, the agency notes that fifteen percent of elderly residents in public housing are headed by someone over age 85, compared with about nine percent of elderly households nationwide.

Formulating a comprehensive elderly housing policy must include collaboration with the private sector. It is critical that relevant parties sit at the table and join in the national discussion. In this regard, AARP is greatly encouraged by the two housing commissions authorized last year in Public Law 106–74, the fiscal year 2000 VA–HUD Appropriations Act.

SECTION 202 SUPPORTIVE HOUSING FOR THE ELDERLY

The Administration proposes an overall increase of $69 million for Section 202 Elderly Housing (from $710 million to $779 million). Of the recommended increase, $19 million would be used to augment new construction under the core program (from $610 million to $629 million). The remaining $50 million would be used to implement the Administration's proposed initiative to construct new assisted living units under Section 202. All other Section 202 activities would be maintained at current funding levels next year. These are: $50 million for service coordinators/congregate services and $50 million for conversion of existing Section 202 projects to assisted living facilities.

Section 202 Supportive Housing for the Elderly was created in 1959 and is the only federal housing program specifically designed to address the physical needs of older persons. Funds are used to build user-friendly apartments at affordable rents with features such as nonskid floors and grab bars—features that prevent serious injuries from falls. Some Section 202 projects also provide supportive services such as meals and light housekeeping.

Housing affordability remains a serious problem for millions of vulnerable American families, despite the nation's robust economy. For low-income older persons the problem is worse because poverty tends to be irreversible at old age. Demand for such housing regularly exceeds supply. More than eight applicants are waiting for every Section 202 vacancy that occurs. Two years ago, the average vacancy rate was a low 1.5 percent. AARP strongly urges adoption of the Administration's proposed $19 million increase in Section 202's core construction program (from $610 million to $629 million).

Included in Section 202's proposed budget is appropriations bill language designed to build upon the program's new assisted living component. This component was enacted last year and authorizes the conversion of existing projects to assisted living. The Administration's proposal now pending before the Appropriations Committee authorizes new construction of assisted living facilities. To fund this provision, an additional $50 million is recommended in Section 202's budget and is earmarked accordingly in the appropriations bill.

Assuming positive action regarding Section 202's proposed initiative, funds would be provided next year to build new assisted living units in addition to the construction of regular Section 202 housing units. The Administration is to be commended for its efforts to make assisted living facilities available to more low-income elderly Americans. However, we are concerned about the impact this new proposal will have on Section 202's core construction program, particularly with respect to the availability of future resources. The need for assisted living facilities in no way diminishes the acute housing problems faced by other low income older persons. Given the enormous size of tomorrow's elderly population, there will be a continuing strong demand for both types of housing.

Funds for service coordinators and congregate services under Section 202 are level funded for next year at a total of $50 million. Service coordinators play a crucial role in meeting the needs of elderly persons. Many older individuals are capable of living independently in their own homes but have greater needs for services. A coordinator links residents with relevant supportive services provided by community agencies. Congregate housing services help prevent the premature institutionalization of elderly and disabled residents. Approximately 4,000 tenants are currently served in thirteen projects.

AARP recommends that a minimum of 5,000 vouchers be designated to fund the tenant-based assistance program for younger persons with disabilities authorized in the Housing and Community Development Act of 1992. We further recommend that these vouchers be targeted to public housing authorities (PHAs) which have been most affected by problems that have occurred as the result of housing the younger disabled with the elderly. PHAs need these resources along with additional development and modernization funds in order to meet the challenge of providing real housing alternatives and choices to younger persons with disabilities.

PROMOTING THE INDEPENDENCE OF FRAIL OLDER PERSONS

At a minimum, AARP recommends preserving the $55 million funding level earmarked for public housing supportive services. These funds support congregate housing services and also service coordinators which are invaluable to those in elderly projects.

Service coordinators have proven their value as part of the management team in elderly housing. The need for such staff is especially acute in public housing projects for the elderly, which often include large numbers of residents with mental and physical disabilities. AARP believes these and congregate housing costs should be an integral part of a project's operating budget.

AARP urges adoption of the Administration's recommended increase for the Housing Counseling Assistance Program (from $15 million to $24 million). This program requires independent counseling for those elderly homeowners who seek FHA-insured reverse mortgages. These mortgages allow older homeowners who are "house rich but cash poor" to tap into the equity in their homes to pay for meeting basic needs.

CORPORATION FOR NATIONAL AND COMMUNITY SERVICE

AARP recommends that sufficient resources be made available for programs administered by the Corporation for National and Community Service. Older Americans are not only participants in programs like AmeriCorps, but recipients of its community-based services as well. For example, persons participate in programs as mentors and tutors to youngsters in schools across the nation. These valuable activities foster civic responsibility and strengthen the ties that bind us as a people.

Thank you again for this opportunity to comment on some of the Administration's budget proposals for fiscal year 2001.

COMMUNITY DEVELOPMENT FINANCIAL INSTITUTION

PREPARED STATEMENT OF THE NATIONAL COMMUNITY CAPITAL ASSOCIATION

On behalf of National Community Capital Association, I am writing to urge you to support the full $125 million appropriation for the Community Development Financial Institutions (CDFI) Fund for fiscal year 2001. My name is Mark Pinsky and I am the President and Chief Executive Officer of National Community Capital Association headquartered in Philadelphia, Pennsylvania.

National Community Capital Association is a national financial intermediary comprised of 52 member community development financial institutions that lend and invest in many of the nation's poorest urban, rural, and reservation-based communities. National Community Capital also represents more than 215 Associates-organizations and individuals that support our mission to act as a catalyst for lasting social, economic, and political justice by helping institutions and individuals provide capital that increases resources and opportunities for economically disadvantaged people and communities.

For the past five years, the CDFI Fund has been critical to the boom in the community development finance industry. The CDFI Fund has primed the pump for CDFIs to leverage, loan, and invest nearly $4 billion in our nation's poorest communities. These CDFIs have financed small businesses, childcare facilities and charter schools-creating jobs and supporting microentrepreneurs-and developed affordable housing and community facilities.

The CDFI Fund bolsters economic development by investing in and assisting CDFIs-financial intermediaries that have community development as their primary mission. With capital from primarily private-sector sources, CDFIs serve as bridge institutions that bring unconventional borrowers and consumers to conventional financial services and excel in using sound business practices to leverage conventional, private financing into poor communities. At a time when government's commitment and ability to serve low-income and low-wealth people is rapidly declining, CDFIs represent an important and unmatched combination of entrepreneurial innovation and public-purpose finance.

The CDFI Fund has been productive and successful in issuing awards and has built a balanced national portfolio of urban and rural and large and small CDFIs with geographic diversity. The Fund has certified 382 organizations in 47 states and made awards in 43 states, Puerto Rico, and the District of Columbia. Increasingly, demand for the Fund's resources is great-in the past five rounds of funding, applicants to the Fund's Core Component have requested more than five times the available funding.

For a decade, National Community Capital has surveyed its member CDFIs on capitalization, impact, trends, and growth[1]. Based on our longitudinal data, two things are clear-the CDFI industry is growing stronger and expanding at an unprecedented pace and the CDFI Fund has played a major role in this growth of the industry.

The most significant contribution of this increase in net assets over the last two years has been the CDFI Fund. Through 1998, the fund awarded $110 million in equity to CDFIs, of which $38 million went to CDFIs in our sample. The fund requires that every dollar granted must be matched from another source, meaning it has helped leverage an additional $110 million in equity to the industry. The influx of equity capital from the Fund and other sources has been a significant trend in the industry for several years, contributing to the overall increase in equity capital for the Member CDFIs as a percentage of total capital from 12 percent in 1990 to 37 percent in 1998.

Why is equity capital important? Equity capital is the engine driving institutional strength and permanence for CDFIs by:

—Enabling CDFIs to leverage more debt and thus increasing the amount of loan capital several-fold, which in turn fuels growth in lending and investment into distressed communities;

—Promoting higher self-sufficiency through lower cost of funds and higher earned income;

—Allowing CDFIs to take more risks, which helps them to serve their markets better with more flexible products.

The CDFI Fund is a model program that has been innovative, investment-oriented, and business-like in its funding. Rooted in the bipartisan principles of building private markets, creating partnerships, and providing the tools to enable poor individuals and communities to become self-sufficient stakeholders in their own future, the Fund invests in building sustainable institutions, not just building projects. With the Fund's critical capital and support, CDFIs can better respond to their markets by increasing their ability to manage risk, to enhance capacity, and to be flexible in their financing.

RECOMMENDATIONS

National Community Capital sees two important ways to further strengthen the CDFI Fund's work.

Raise the funding cap

National Community Capital fully understands the CDFI Fund's need and desire to get funding to the maximum number of economically disadvantaged people and communities. For all the good work that the CDFI industry has done, however, many communities still have no access to community development financing. The success of the Fund ought to be measured by considering the number of poor people served rather than the number of organizations.

As the CDFI industry grows, performance-driven CDFIs continue to be the most effective at serving economically disadvantaged people and communities. When effective CDFIs are forced to sit out a CDFI Funding round because they've reached the $5 million over 3 year funding cap-essentially penalizing the CDFI for their excellent performance, economically distressed communities and poor people suffer needlessly. As a way to increase the much-needed flow of the Fund's capital into communities-without sacrificing quality, National Community Capital strongly recommends that the Fund raise the funding cap.

An increase in the funding cap from $5 million over three years to $10 million over three years would allow the growing number of CDFIs that could effectively use additional capital from the Fund to serve more economically disadvantaged people to do so. Currently, National Community Capital and ten of its Members are at or near the cap. These high-performing CDFIs have the capacity and reach into down markets but are constrained by the cap from meeting the growing demand for their financing and development services.

National Community Capital believes the cap should be raised for CDFIs that: (1) are in compliance with their performance measures, and (2) have demonstrated that at least 75 percent of their funds, on a 12 month average, are invested in the communities they seek to serve.

Adopt the small and emerging CDFI access program (SECAP)

We applaud the Fund's efforts to meet the growing demand for its programs and its plans to better serve small, emerging and rural CDFIs at all stages of organiza-

[1] National Community Capital's Charting CDFI Progress, September 1999.

tional development, of all asset sizes, in all areas of the nation, and serving all types of populations (i.e., rural and urban). We echo the sense of the Congress in the fiscal year 2000 Appropriations Conference Report and encourage the Fund to institutionalize a Small and Emerging CDFI Access Program (SECAP) to nurture this blend of CDFIs.

Since 1996, thirty-seven National Community Capital Members have been awarded more than $76 million by the CDFI Fund Program. National Community Capital Members are performance-driven CDFIs that, as of December 31, 1998, have provided more than $1.3 billion in financing that has helped to create more than 66,000 jobs and more than 86,000 units of affordable housing in low-income communities. Since 1986, National Community Capital Members have leveraged more than $4 billion in public and private investment into some of the nation's poorest communities, with a loan loss rate of only 1.7 percent.

On behalf of National Community Capital, its Board and its membership, I urge you to vote in favor of a $125 million appropriation for the CDFI Fund. We appreciate the opportunity to comment.

PREPARED STATEMENT OF THE COALITION OF COMMUNITY DEVELOPMENT FINANCIAL INSTITUTIONS

Chairman Bond, Senator Mikulski, and distinguished members of the Subcommittee, thank you for the opportunity to submit testimony on the President's budget request for the Community Development Financial Institutions (CDFI) Fund. The President has requested $125 million for the CDFI Fund in fiscal year 2001. The CDFI Coalition, representing more than 465 CDFIs working in all 50 states, urges you to support the President's full request. This appropriation will enable the CDFI Fund to support institutions across the country engaged in valuable activities to benefit underserved Americans.

We urge your support of the full appropriation for three key reasons:

—The CDFI Fund has responded to key market needs identified by the CDFI industry(financial and human capital.

—The organizations the CDFI Fund supports have made significant contributions to foster economic opportunity in distressed communities.

—Demand for the Fund's resources has been oversubscribed since the inception of the program. This demand will only increase due to the rapid growth of the industry and the CDFI Fund's outreach to rural, Native American and other fledgling CDFIs.

The CDFI Coalition formed in 1992 to respond to initiatives by the Administration and Congress to support CDFIs. We served as a primary resource in drafting the legislation that created the CDFI Fund. Since that time we have devoted our efforts to building public and financial support for the CDFI industry through advocacy, public education, knowledge building, and outreach.

The CDFI Coalition represents community development loan funds, community development banks, community development credit unions, microenterprise lenders, and community development venture capital funds. Together our members have loaned and invested some $5 billion in our nation's most distressed communities.

WHAT ARE CDFIS?

CDFIs bring private sector capital to bear on problems that have historically required public sector solutions. CDFIs emerged in response to the credit and capital-related assistance needs of our nation's most economically and socially distressed and disinvested rural, urban, and tribal communities. Their purpose is to create permanent solutions in these communities. They are bridge institutions that link unconventional borrowers and conventional financial institutions. They all have community development as their primary mission and carry out that mission by financing businesses and community facilities, job creation and development, and affordable housing in low and moderate-income communities.

The government did not create CDFIs. Some CDFIs have histories stretching back five decades. These organizations are the responses of hundreds of local communities to fill market niches that large banks and other conventional financial institutions could not. They are based on bipartisan principles of building private markets, creating partnerships, and providing the tools to enable poor individuals and communities to become self-sufficient and stakeholders in their own future.

CDFIs provide technical assistance to assist "unbankable" customers, demonstrate that poor urban and rural areas can be profitable markets, help banks target their community reinvestment funding, and can bring innovative and trailblazing products and services to disinvested areas. CDFIs attract private investment, they don't

substitute for it. They rely on capital-led strategies to address economic and social problems, and seek to establish capital relationships within their markets that seed sustainability.

The effect that CDFIs have on their communities cannot be underestimated. Not only do local organizations make the decisions about how to best meet community needs, the ripple effects of CDFI activity bring responsible homeowners, locally-owned businesses, neighborhood facilities, first-time savers, and other positive benefits to communities that reach far beyond the financial.

WHY IS THE CDFI FUND IMPORTANT?

The CDFI Fund is a unique government effort created to help capitalize financial institutions committed to serving and improving low-income and low-wealth communities. The Fund bolsters economic development by investing in and assisting CDFIs. By investing in institutions, not just projects, the Fund helps CDFIs better respond to their markets by increasing their ability to manage risk, to enhance capacity, and to be flexible in their financing. With capital from primarily private sector sources, CDFIs excel in using sound business practices to leverage conventional, private financing into poor communities.

Support of these organizations through the CDFI Fund makes the most effective use of limited federal resources. It uses relatively small amounts of federal money to leverage significant amounts of private and non-federal dollars, promotes private entrepreneurship, and encourages self-help and self-sufficiency.

WHAT HAS THE CDFI FUND ACCOMPLISHED?

The CDFI Fund has been innovative, investment-oriented, and business-like in approaching its funding. Through its rigorous review process, the Fund has made awards that have provided opportunity and insisted on institutional viability. Recognizing that there are diverse organizational levels, the Fund has established different windows for participants. In addition to the "Core CDFI Program," the Fund has implemented an "Intermediary Program" through which organizations in need of assistance can participate through CDFI intermediaries, and a "Technical Assistance Program" which offers financial support to CDFIs working to build their organizational capacity.

The CDFI Fund has been productive and successful in issuing its first four rounds of awards. So far, the Fund has awarded $200 million to 198 CDFIs through its Core Program Component, $7 million to 158 CDFIs with its Technical Assistance Program, and has reached more than 200 CDFIs through its $15 million invested in CDFI Intermediaries. The Fund has also awarded $89 million to more than 270 banks and thrifts through the Bank Enterprise Awards Program, resulting in more than $700 million in direct financing services in distressed communities as well as $271 million invested in CDFIs.

Through these awards the Fund has built a balanced national portfolio of urban and rural and large and small CDFIs with geographic diversity. The Fund has increased its outreach into rural communities and to rural CDFIs, and has made significant progress on its Native American Lending Study and Action Plan to identify barriers to investment in Native American communities.

WHY CONTINUE TO SUPPORT THE CDFI FUND?

CDFIs, their borrowers, and the communities in which they work need the capital that the CDFI Fund offers. Support for the CDFI Fund is essential to their vital work. Increased support will enable CDFIs to continue to rebuild and revitalize our nation's communities. From its survey of its First Round Core Program awardees, the Fund's initial findings illustrate the significant impact of the Fund's assistance on CDFIs. Collectively, this group of 30 CDFIs has taken a $34 million investment and turned it into $565 million in loans and investments to help create or expand 1,148 businesses and 1,895 microenterprises; create or retain more than 12,000 jobs; and develop more than 8,600 affordable housing units and 285 community facilities.

The CDFI Fund offers the combination of increased access to capital and the institutional capacity building that is vital to CDFIs and, through them, to our nation's distressed communities. CDFI Fund's programs are consistently oversubscribed. In the midst of its growth the CDFI industry is experiencing substantial demand. In the first five rounds of Core Component awards, more than 875 CDFIs have requested more than $1.1 billion. The Fund has awarded a total of $200 million, less than one-fifth of the funds requested.

An appropriation to the CDFI Fund generates substantial private dollars to distressed communities. In analysis of its 1996 Core Program awardees, the Fund found that its First Round investment resulted in CDFI asset growth of 122 percent,

increasing from $473 million to $1.05 billion by 1998. CDFIs are very successful at leveraging private dollars. They build bridges between conventional financial services and unconventional borrowers and often work where banks do not. The dollar for dollar match required by the CDFI Fund represents only a fraction of the long term leveraging potential of this program. Every dollar of CDFI equity investment can leverage up to $50–$100 into low-income communities.

CDFIs will continue to benefit from the CDFI Fund's Training and Technical Assistance Initiatives. A key part of the Fund's institution-building mandate is its training and technical assistance initiative. No issue is more critical to the viability of this much-needed industry than building its human capacity. The CDFI Coalition, with a Ford Foundation grant, conducted an extensive study of the human capacity needs of the CDFI industry. Our findings stressed the need for training and proposed efficient and economical approaches to enhance the industry's performance.

WHY SUPPORT A $125 MILLION APPROPRIATION?

With increased support the CDFI Fund can broaden its reach and impact, enabling CDFIs to better reach poor communities. The effect the CDFI Fund has had on the CDFI industry is clear: the CDFI industry is growing stronger and expanding at an unprecedented pace. According to figures from Coalition members, the CDFI industry has nearly doubled its capital available for lending and investing since 1995.

Last year, the conference appropriations report developed by your committee contained language urging the Fund to develop a Small and Emerging CDFI Access Program (SECAP). The Fund has announced intent to incorporate elements of the SECAP proposal into its fiscal year 2001 programs. By providing access to limited capital assistance with a streamlined business plan, flexible matching requirements and training and technical assistance funding, SECAP will greatly expand the Fund's potential customer base. Expansion of the customer base, though, will only increase demand for the Fund's resources.

In addition to SECAP, the CDFI Fund has announced plans to assist CDFIs to break barriers to capital access in rural and Native American communities. CDFIs in these communities, which face unique barriers in their access to capital and credit, are another source of demand for the Fund's resources which has not been fully tapped. These CDFIs provide valuable lending, asset-building, and technical assistance services that help build poor communities, but have been unable to access the Fund's resources to augment their efforts.

Without additional resources, the Fund's commendable efforts to increase outreach to underserved communities and the younger, smaller CDFIs that may be working in those communities as well as in urban areas may go unrewarded. We urge you to provide the Fund with the ability to serve the broad CDFI field, and, in turn, to serve low-wealth and underserved Americans.

Given the demand and success we have described above it is appropriate for the Congress to continue to invest in this program. We are strongly urging you to provide increased support by appropriating the full $125 million requested by the President. In this era of scarce resources it is incumbent upon the government to use those resources strategically and effectively and to maximize their impact. The CDFI Fund can use its support to enable organizations with proven track records to expand and diversify their services, grow responsibly, and sustain themselves over time.

MISCELLANEOUS

PREPARED STATEMENT OF THE AMERICAN INDIAN HIGHER EDUCATION CONSORTIUM

INTRODUCTION

Mr. Chairman and Members of the Subcommittee, on behalf of this nation's 32 American Indian Tribal Colleges and Universities, which comprise the American Indian Higher Education Consortium (AIHEC), thank you for the opportunity to express our views and concerns to the Subcommittee. Our statement concentrates on four program areas under the jurisdiction of this Subcommittee: National Science Foundation (NSF); National Aeronautics and Space Administration (NASA); and the Departments of Veterans' Affairs and Housing and Urban Development.

National Science Foundation.—Within the National Science Foundation (NSF), two programs under the Division of Educational System Reform (ESR) have supported a number of Tribal Colleges: the Tribal College—Rural Systemic Initiative and the Louis Stokes Alliances for Minority Participation program. The President's

fiscal year 2001 budget proposes a new $10 million Tribal College Initiative to help bridge the Digital Divide by encouraging American Indians to pursue information technology and other science and technology fields as areas of study as well as to increase the capacity of Tribal Colleges to offer courses in these areas. We urge Congress to support the $10 million Tribal College initiative proposed in this year's budget and the ESR Division's budget request of $110 million at the highest level possible. We also seek report language that will ensure the Tribal Colleges' input in the program design and regulations.

National Aeronautics and Space Administration (NASA).—For the past several years, Tribal Colleges and Universities have been awarded at least $3 million through a number of NASA's competitive grant programs. These programs seek to strengthen minority-serving institutions' capacity in math, science, engineering, and technology (MSET) research and course delivery, and to increase opportunities for MSET partnerships. We urge Congress to support NASA's important education and outreach activities and include report language that would ensure Tribal Colleges' participation in higher education and minority-serving programs.

Department of Housing and Urban Development.—The President's fiscal year 2001 budget proposes a $5 million Tribal College program within the Community Development Block Grant program to help the Tribal College expand their housing and community development projects. We strongly urge the Subcommittee to fund this important program at the $5 million recommended in the fiscal year 2001 budget request.

Department of Veterans' Affairs.—The Tribal Colleges support continued funding for a pilot program within the Center for Minority Veterans that provides health services for American Indian veterans through the local Indian Health Service Clinic. We hope this program can be expanded to include partnerships with Tribal Colleges and Universities that would permit our institutions to serve American Indian veterans in our isolated communities and seek report language encouraging Tribal College partnerships.

BACKGROUND ON TRIBAL COLLEGES

The dismal statistics concerning the American Indian experience in education brought tribal leaders to the realization that only through local, culturally-based education could many American Indians succeed in higher education and help bring desperately needed economic development to the reservations. The Tribal College movement began more than 30 years ago as a sound and well thought-out solution to this problem. In the late 1960s and early 1970s, the first Tribal Colleges were chartered on remote reservations by their respective tribal governments, to be governed by boards of local tribal people. These first colleges were started, with little money or support, in abandoned and even condemned government buildings and old trailers, often using three-legged desks, wood crates for shelves and typewriters with missing keys. In 1972, the first six tribally-controlled institutions came together to form the American Indian Higher Education Consortium. Today, AIHEC is a cooperatively sponsored effort and integral support network for 32 member institutions in the United States and one in Canada, and has become the premier national voice on American Indian higher education.

Located in 12 states, Tribal Colleges and Universities now serve more than 25,000 students from more than 250 federally recognized tribes. Tribal Colleges offer primarily two-year degrees, with some colleges offering four-year and graduate degrees. Together, the colleges represent the most significant development in American Indian education history, promoting achievement among students who would otherwise never know educational success. All of the Tribal Colleges, with the exception of four institutions that are accreditation candidates, are fully accredited by mainstream regional accreditation associations.

Funding for our basic operations, which is authorized under the Tribally-Controlled College or University Assistance Act and funded through the Department of Interior appropriations bill, remains grossly inadequate. Despite an increase of $4 million in fiscal year 2000, the Tribal Colleges' appropriation of $3,433 per Indian full-time student (ISC) is dramatically less than the average per student revenue of mainstream two-year institutions and falls far short of the authorized level of funding of $6,000 per ISC. In addition, due to the location of the majority of Tribal Colleges on federal trust territory, states have no obligation and in most cases, do not fund the Tribal Colleges. In fact, most states do not even fund the institutions for the non-Indian students who attend our colleges despite the fact that non-Indian enrollment at the Tribal Colleges is approximately 20 percent.

Tribal Colleges serve as a vehicle to accomplish what centuries of paternalism and outside experimentation have failed to do—allow American Indians to regain self-

sufficiency. Paramount to achieving this goal is not only the innovative teaching philosophies of the Tribal Colleges, but also the fact that their graduates have a desire to stay on their reservations, contribute to the community and serve as role models and leaders. This "ripple effect" can be seen in increased community pride, the increased importance of succeeding in elementary and secondary education and in Tribal College graduates implementing creative and effective solutions for their communities' problems.

Today, approximately one in five American Indians live on a reservation. Past federal policies of relocation and neglect of these trust territories have left once proud Indian communities in abject poverty. The logical alternative to this lose-lose situation is demonstrated by the Tribal Colleges. A minimal investment in education and infrastructure and the knowledge that those best qualified to coordinate growth are the American Indians themselves have served as the keystones for the Tribal College movement. Indian communities can be effectively developed, with residents being taken off the welfare rolls and gainfully employed, lowering taxes for all Americans and providing crucial services and production. We must continue to support and invest in the lost human potential within these rural communities and gain new avenues to social and economic change.

JUSTIFICATIONS

In an effort to promote Tribal College access to programs throughout the Federal Government, Congress took the lead in urging the President to sign an Executive Order on Tribal Colleges and Universities. In 1996 Executive Order No. 13021 was signed. We greatly appreciate Congress' long-standing bipartisan support of this effort. Consistent with Congress' intent, the Order's primary purpose is to promote the Tribal Colleges' participation in programs throughout the Federal Government and bring more attention to our accomplishments as accredited higher education institutions. It will greatly assist the colleges in our struggle to promote high quality education and self-sufficiency. However, progress of the Executive Order's implementation has been slow. Congress must provide oversight on how the federal departments are adhering to its mandates. Before we can even begin to realize the opportunities of the Executive Order, certain issues must be addressed. We seek appropriations report language, promoting the Tribal Colleges' participation in Federal initiatives and higher education programs throughout the Federal Government.

National Science Foundation programs.—The President's fiscal year 2001 budget proposes a $10 million initiative for Tribal Colleges that will encourage Native Americans to pursue information technology and other science and technology fields of study as well as increase the capability of Tribal Colleges to offer relevant courses and enhance K–12 education in feeder school systems. This exciting new program will help the Tribal Colleges to address the considerable challenges of access to advanced technology for their isolated reservation communities. We strongly urge Congress to appropriate $10 million for this exciting initiative that will help the Tribal Colleges to turn the Digital Divide into Digital Opportunity for the rural communities they serve. We strongly urge the Subcommittee to fund this important program at the $10 million recommended in the fiscal year 2001 budget request and request report language that will ensure the Tribal Colleges' input in the program design and regulations.

In fiscal year 1999, NSF expanded its commitment to the "High Plains Rural Systemic Initiative (HP–RSI)," a collaborative effort to promote K–12 science, math, engineering, and technology using 18 Tribal Colleges as spring boards for addressing systemic change in these subject areas. Each participating Tribal College is responsible for providing leadership to the K–12 school systems located on their respective reservations. All aspects of the school system are considered in addressing systemic reform from community and parental participation, providing professional development activities, building a broad-based support including the business community, promoting the convergence of resources to support the initiative and instituting aligned student assessment systems. All of these activities are organized and implemented with careful consideration of the cultural academic needs of the respective tribe and students being served. We strongly urge Congress to support the requested $110 million for the ESR division in fiscal year 2001, to ensure the expansion of the Tribal College—Rural Systemic Initiative to all Tribal Colleges and Universities and greater access to other NSF programs.

In addition, 25 Tribal Colleges are supported under an award from the Louis Stokes Alliances for Minority Participation (AMP) program. The grant under this program, known as the All Nations Alliance for Minority Participation, which is based at Salish Kootenai College in Pablo, Montana, brings together 25 Tribal Colleges and 32 state colleges and universities in nine states and is designed to in-

crease substantially the quantity and quality of minority students receiving baccalaureate degrees in science, mathematics, engineering, and technology (SMET). Subsequently, AMP aims to increase the number of these students entering graduate schools to attain the doctorate in SMET fields normally supported by NSF. The AMP program encourages the formation of coalitions among leaders throughout academia, government, industry, and other organizations. The AMP program supports undergraduate systemic reform in this alliance with partners from both two and four year higher education institutions, businesses and industries, national research laboratories, local, state, and federal agencies. The program will maximize the potential for making a significant positive impact on maintaining the nation's leadership role in science and technology. We strongly urge the Congress to support all ESR projects at the highest funding level.

National Aeronautics and Space Administration (NASA).—For the past several years Tribal Colleges and Universities have been awarded a minimum of $3 million through a number of NASA's competitive grant programs. These programs seek to strengthen minority-serving institutions' capacity in math, science, engineering, and technology research and course delivery and to increase opportunities for math, science, engineering, and technology (MSET) partnerships. In October 1998, NASA recognized the importance of Tribal Colleges by hosted its eighth Annual Users' Conference at Southwestern Indian Polytechnic Institute, a Tribal College in Albuquerque, New Mexico. However, many Tribal Colleges are still shut out of a large number of NASA programs because they are two-year institutions. Tribal Colleges should be participating at much higher levels. We ask this Subcommittee to issue report language that would encourage stronger Tribal College participation in NASA's competitive grant programs.

Despite our successes, Tribal Colleges remain the most poorly funded group of higher education institutions in this country, and although conditions at some have improved substantially, many of the colleges still operate in trailers, cast-off buildings, and facilities with crumbling foundations, faulty wiring and leaking roofs. In response to a recent query from the Senate Indian Affairs Committee, AIHEC surveyed the Tribal Colleges to determine the status of technology infrastructure at the nation's 32 Tribal Colleges. The results revealed that the 21 responding colleges estimated a cost of $4,650,000 to be given basic technology access and capabilities. Expanding this average indicates that the 32 colleges in the United States would require a minimum of $8,000,000 to be brought safely into the first phase of the new technology era. However, it will require several more millions of dollars to afford the Tribal Colleges and their communities to expand beyond basic technology and participate fully in cutting edge opportunities, therefore bridging the digital divide. We respectfully request appropriations report language to encourage further expansion of existing programs as well as new initiatives at the National Science Foundation and NASA to bridge the tremendous technology infrastructure needs at the Tribal Colleges and Universities.

Department of Housing and Urban Development.—We are very excited about the $5 million initiative proposed in the President's fiscal year 2001 budget for a Tribal College Community Development Block Grant program. This grant program, patterned after the current and highly successful Historically Black Colleges and Universities (HBCUs) program, will enable our colleges to expand their roles and effectiveness in addressing community development/neighborhood revitalization needs in their communities. Some areas to be supported include housing rehabilitation, business development, pre-employment counseling, job training, and job creation. We strongly urge Congress to support this Tribal College program at the $5 million level recommended in the President's fiscal year 2001 budget.

Department of Veterans' Affairs.—Tribal Colleges support continued funding of a pilot program within the Center for Minority Veterans that provides health services for Indian veterans through the local Indian Health Services Clinic. This pilot program, run by the Oneida Tribe in Wisconsin, serves Indian veterans locally who would otherwise be forced to travel great distances to receive services from a VA hospital or clinic. Some of the Tribal Colleges currently offer well-respected nursing and healthcare programs. We hope the Oneida pilot program can be expanded to Tribal Colleges and Universities and would allow our institutions to strengthen and expand upon Wellness Centers. These centers serve the many Indian veterans who are isolated from VA medical services. Such partnerships could also provide the remote Indian reservations served by the Tribal Colleges with expanded access to telemedicine services. We ask that Congress agree to report language that would encourage greater participation by Tribal Colleges and ultimately improve the delivery of vital healthcare services to the proud veterans of their rural reservation communities.

CONCLUSION

In light of the justifications presented in this statement and the overwhelming evidence that without an insurgence of educational and technology centered opportunity the Digital Divide will widen in rural America, we urge the Subcommittee to increase funding for Tribal Colleges to help bring economic development to Indian Country. Fulfillment of AIHEC's fiscal year 2001 request will strengthen the mission of our colleges and the enormous, positive impact our institutions have on our communities and will help ensure that we are able to properly educate and prepare thousands of American Indians for the workforce of the 21st century. Tribal Colleges have been extremely responsible with the federal support they have received in the last 19 years. It is important that the Federal Government now capitalize on its investment. As the 1997 Carnegie Report on Tribal Colleges stated, "Now, as strongly as ever, we repeat our conviction that Tribal Colleges deserve continued support. Their value has been proven, but their vision is not yet fulfilled" (Native American Colleges: Progress and Prospects, Carnegie Foundation for the Advancement of Teaching, 1997). Our institutions have proven themselves to be a sound federal investment, and we ask for your continued support.

Thank you.

PREPARED STATEMENT OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS

Mr. Chairman and Members of the Subcommittee: The American Society of Civil Engineers (ASCE) is pleased to offer this statement for the record on the proposed budgets for the Environmental Protection Agency (EPA), the Department of Housing and Urban Development (HUD) the Federal Emergency Management Agency (FEMA), and the National Science Foundation (NSF) for fiscal year 2001.

ASCE was founded in 1852 and is the country's oldest national civil engineering organization. It represents more than 125,000 civil engineers in private practice, government, industry and academia who are dedicated to the advancement of the science and profession of civil engineering. ASCE is a 501(c)(3) non-profit educational and professional society.

THE ENVIRONMENTAL PROTECTION AGENCY (EPA)

The Administration has proposed a budget for the EPA of $7.3 billion in fiscal year 2001. In general, ASCE believes that the Agency's budget proposal establishes the proper environmental priorities for 2001. We remain concerned, however, over the direction of some of the Agency's programs, and we encourage the Congress to adjust the budget accordingly.

As an initial matter, we note that proposed funding for all Clean Water Act programs has been reduced from $480 million in fiscal year 2000 to $411 million in fiscal year 2001. This is a very disturbing trend, and we wish to focus our comments on two aspects of this proposed reduction in the hope that the Congress will see fit to restore these critically needed programs to an effective funding level for fiscal year 2001.

The Clean Water Act State Revolving Loan Fund (SRF) Program

Waste discharges from municipal sewage treatment plants are a significant source of water-quality problems throughout the country. States report that municipal discharges are the second leading source of water-quality impairment in all of the nation's waters (rivers and streams, lakes, and estuaries and coastal waters).

The Clean Water Act (CWA) prescribes performance levels to be attained by municipal sewage treatment plants in order to prevent the discharge of harmful quantities of waste into surface waters and to ensure that residual sewage sludge meets environmental quality standards. It requires secondary treatment of sewage (equivalent to removing 85 percent of raw wastes), or treatment more stringent than secondary where needed to achieve water quality standards and desired use of a river, stream, or lake. Since 1972, Congress has appropriated $69.5 billion to assist cities in complying with the Act.

Amendments enacted in 1987 established a new grants program to support State Water Pollution Control Revolving Funds (SRFs). The SRF program, which had total authorizations of $8.4 billion between 1987 and 1994, has leveraged more than $30 billion in financial assistance to local communities since 1987. Federal contributions to SRFs were intended to assist in making a transition to full state and local financing by fiscal year 1995; SRFs were to be sustained through repayment of loans made from the fund after that date.

But the tremendous national need for wastewater treatment plant funding requires continued federal assistance. We understand that the Office of Water is preparing a new assessment of national wastewater financing needs that is expected to put the total bill at more than $300 billion over the next 20 years.

Incredibly, despite the staggering need and the EPA's acknowledgement in its fiscal year 2001 budget justification that the SRF "is a significant financial tool for achieving clean and safe water," the Agency actually has proposed to cut funding for the SRF program budget by $550 million in fiscal year 2001.

ASCE urgently recommends that the Congress restore the $550 million to bring the Clean Water SRF program to its fiscal year 2000 level of $1.35 billion.

The Total Maximum Daily Load (TMDL) Program

Section 303(d) of the Clean Water Act requires states to identify pollution-impaired water segments and develop "total maximum daily loads" (TMDLs) that set the maximum amount of pollution that a water body can receive without violating water-quality standards.

For waters impaired by nonpoint source runoff, the primary implementation measures will be state-run nonpoint source management programs coupled with state, local, and federal land-management programs. Farmers and ranchers may be asked to use alternative methods in their operations to prevent fertilizers and pesticides from reaching rivers. Cities may be required to control and treat runoff from their streets.

The EPA issued proposed revisions to the water quality planning and management regulations in August 1999 to strengthen the TIVIDL program, which has been chronically underfunded by the Agency and the states.

The President's budget proposes increased funding of $45 million for grants to states to address polluted water bodies under section 303(d). This funding, when matched by states, is supposed to result in an increase of $75 million annually for development of TMDLs. The fiscal year 2001 budget also includes an additional $50 million in funding for section 319 grants to states to implement projects to reduce pollution from diffuse or "nonpoint" sources.

ASCE supports the regulatory effort to strengthen the TMDL program and applauds the proposed funding increases for TMDLs and nonpoint source controls. But we believe that the Agency simply has robbed Peter without paying Paul by shifting SRF program funds into the TMDL and nonpoint source programs, to the detriment of each program and at no gain to the environment.

Each program is worthy of increased funding in fiscal year 2001. Congress should tap the projected surplus in fiscal year 2001 to ensure that none of these essential programs suffers from a lack of resources due to the EPA's misplaced priorities for the SRF program.

THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)

As the Congress considers two bills that would significantly amend the National Manufactured Housing Construction and Safety Standards Act of 1974, 42 U.S.C. 5401 note et seq., ASCE is deeply concerned with provisions in the legislation that would change the federal standard-setting process for manufactured housing (mobile homes and modular housing).

S. 1452, as reported by the Senate Committee on Banking, Housing and Urban Affairs on March 8, and title XI of H.R. 1776, as reported by the House Committee on Banking and Financial Services on March 15, would unconstitutionally privatize the writing of federal regulations establishing national construction and safety standards for manufactured housing. Specifically, the bills would empower a "consensus committee" of private citizens appointed by a private standard-setting organization to write, and review the enforcement of, federal regulations establishing construction and safety standards for manufactured housing.

It is axiomatic that the Congress may not constitutionally grant to a committee of private citizens the authority to write legally binding prescriptions governing the application of federal authority for the benefit of themselves or others. This type of delegation has never been upheld by the Supreme Court.[1]

S. 1452 and H.R. 1776 are misguided. They grew out of frustration over a lack of aggressive congressional oversight of HUD's regulation of manufactured housing since 1974 and the Department's inability to adequately finance the regulatory program for manufactured housing. The President's budget proposal for fiscal year 2001 continues this deplorable situation.

[1] See Schechter v. U.S., 295 U.S. 495, 55 S.Ct. 837 (1935) (striking down a federal code delegating the regulation of poultry slaughterhouses to private citizens).

Specifically, the President's budget calls for spending $17 million exclusively for the inspection and monitoring of manufactured housing. Virtually all of this money will come from a $24 fee paid by the industry on the production of each of approximately 700,000 "transportable sections" in 2001.

No new money has been requested from the Congress to allow the Department to upgrade the existing construction and safety standards that were adopted in 1976. We urge the Committee to appropriate $350,000 in fiscal year 2001 to support an increase in the HUD staff so that it may begin rewriting the 1976 standards.

THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

Flood Hazard Mapping Program

The fiscal year 2000 budget request would provide $134.4 million for FEMA to begin modernizing its Flood Hazard Mapping program. ASCE strongly supports this funding request.

FEMA's Flood Hazard Mapping modernization plan will improve:

—map accuracy and completeness;

—map utility;

—map production; and

—public awareness and customer service.

It will also reduce the burden on taxpayers for disaster relief and maintain the maps as one of the most valuable national resources for flood hazard mitigation.

These maps are currently used by numerous constituencies for a variety of applications. The maps are most frequently used by insurance companies and agents, lenders, property owners, flood map determination firms and real estate professionals as part of the mortgage transaction process. Each of the 15 million mortgages transacted each year and every building permit issued by a community requires the use of flood hazard maps.

However, the flood hazard maps are also used by floodplain managers, community planners, surveyors, engineers and disaster and emergency response officials for mitigation, risk assessment, disaster preparedness, and response and recovery activities. The timely production and distribution of these maps is critical to making sound decisions regarding the purchase or development of the nation's land.

Unfortunately, these maps are aging. Approximately 45 percent of the maps are 10 years old, and 70 percent are 5 years or older. The effect of aging is that many of the maps are inaccurate. They reflect engineering analyses that are out of date as a result of subsequent development or because newer data and/or improved methods are now available. In addition, many maps show flood-prone areas that were analyzed using only approximate methods that are not accurate for sound floodplain management. There also remain flood-prone communities and flooding sources nationwide that have not been analyzed.

FEMA's Flood Hazard Mapping Program is at a critical juncture. To fulfill the ultimate mission of accurately identifying all the nation's significant flood hazards and also of educating and alerting the public to the risks of flooding, challenges must be met. Technology offers a powerful tool to meet these challenges.

For these reasons, ASCE strongly urges this subcommittee to provide the necessary funding for FEMA to update its Flood Hazard Mapping program. The benefits of implementing the Map Modernization Plan will accrue to the citizens of the United States. A conservative benefit/cost analysis shows that this plan will result in more than $2 of reduced flood losses for every $1 invested in accurate, up-to-date, digital flood maps. Implementation will result in improved public safety and welfare. Better flood data and mapping also can assist states and communities in taking preventive actions, such as improving floodplain management, land-use planning, and building design, as well as in planning for pre-disaster mitigation, emergency response, and disaster recovery.

National Dam Safety Program Act

The administration's fiscal year 2001 budget request would provide $5.9 million for FEMA's National Dam Safety Program Act (NDSPA). ASCE strongly supports the funding request for the dam safety program. This modest, yet vital, funding will enable the states to improve their fledgling dam safety programs which, in turn, will translate into reduced risks to life and property. Dam failures are extremely expensive from all points of view, and we should give special attention to the old adage that "an ounce of prevention is worth a pound of cure."

Reports show that an alarming number of dams across the country are showing signs of age and lack proper maintenance. Downstream development is increasing. Most older dams were built without adequate spillways to release water in heavy rains, which causes water to run over the top. Inadequate spillway capacities are

the most common deficiency and a major cause of dam failures. Dam safety officials estimate that thousands of dams are at risk of failing or are disasters waiting to happen. One-fourth of all U.S. dams are more than 50 years old, and by the year 2020, that figure is expected to increase to 85 percent. ASCE estimates that it would cost over $1 billion annually over the next twenty years to rehabilitate all the documented unsafe dams in the United States.

From this perspective, we believe that the fiscal year 2001 budget request of $5.9 million offers a solid starting point for states to begin improving their dam safety programs. However, dam safety is an ongoing effort and much more work needs to be done to ensure that the nation's 93,000 dams continue to work effectively and safety.

THE NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) funds research and education in science and engineering. It does this through grants, contracts, and cooperative agreements to more than 2,000 colleges, universities, and other research institutions. The NSF accounts for about 20 percent of federal support to academic institutions for basic research.

The Administration is proposing to increase the budget of, the NSF from $2.9 billion to $3.5 billion, an expansion of more than 20 percent. We believe this increase is appropriate, given the critical nature of the NSF's mission, and we strongly urge the Committee to approve the requested budget estimate for the NSF.

In particular, we are pleased with the Administration's proposal to increase the engineering research budget at NSF. The proposed increase would support efforts to boost U.S. engineering capabilities.

Mr. Chairman, that concludes our prepared statement. Thank you for your attention to our concerns.

PREPARED STATEMENT OF THE CITY OF GAINESVILLE, FL

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 HUD Appropriations bill to assist with the following three innovative projects the City is undertaking:

—The East Side Community Recreational Facility for recreational and other programs and services to serve at-risk youth and their families as well as a substantial population of low income citizens in the surrounding area,

—The Depot Avenue Project to enable economic redevelopment in a downtown setting including also improving stormwater treatment, developing park facilities, enhancing alternative transportation and restoring an urban wetland, and

—The Sweetwater Branch Project to protect the Florida Aquifer from stormwater runoff which starts out in Gainesville's Sweetwater Branch Basin.

EAST SIDE COMMUNITY RECREATION CENTER PROJECT

The City of Gainesville is seeking a funding strategy for a multi-purpose community-based recreational facility on the east side of our city. The site for this project is in one of our highest poverty and minority-populated areas. Once completed, the center will provide a wide range of programs and opportunities to at-risk youth and their families. It will also provide needed facilities and services for the substantial population of low-income elderly in this area of our community, as well as to all our community.

The demographics of the surrounding service area include the following statistics: (a) Population of approximately 12,000 residents living in 4,000 households, with a median family income of $14,708; (b) 41.1 percent of the families have household incomes below the poverty level; (c) 25.3 percent requiring public assistance of some type, and (d) 84.2 percent of the citizens are African-American.

This is a public/private initiative estimated to cost $2.5 million. Funding has been received or pledged in the amount of $1.5 million. The initiative is being led by a grassroots partnership of business leaders, community leaders, professionals and interested/concerned citizens who have organized themselves as the East Gainesville Park Development Group.

The public agencies involved in this effort include the City of Gainesville, Alachua County, the School Board of Alachua County, and the University of Florida. So far, the project has received considerable financial support or pledges from the City, the County, and private individuals. The University of Florida has pledged to provide coaches and mentors. Additionally, the School Board of Alachua County has ex-

pressed an interest in this facility to help meet its own recreational facility shortfalls.

The plan for this project is based on the need to provide recreational facilities for families and on the desire to provide our youth with such advantages as leadership skills, team participation skills, and computer skills as well as opportunities to participate in physical and mental exercise, arts and crafts, and social activities, and to receive mentoring and after school tutoring. The educational component will include after school tutoring sessions, computer, anger management, life skills, and teen parenting and pregnancy prevention classes. Parental involvement will be encouraged for all activities.

The facility will be sited on a 36-acre parcel of land zoned for park use. The site amenities will include a multipurpose building (estimated at 6,500 square footage in area), serving as a learning resource center and community center. The facility will house the computer lab with computers promised by IBM, and rooms for after school homework and tutoring. Accommodations for indoor recreational and cultural programs will also be provided. The active outdoor amenities will include an interactive water fountain play area, playground and tot lot, picnic areas, two softball fields, two soccer/football fields, three basketball courts, ¼ mile track, —mile jogging/fitness trail, ¼ mile interpretive nature boardwalk and a concession facility. The City of Gainesville will own and operate the park and improvements.

DEPOT AVENUE PROJECT

The Depot Avenue Project is intended to enable economic redevelopment in a downtown setting, to extend park facilities, to support alternative transportation, to improve stormwater treatment, and to restore a small urban wetland in Gainesville. Funding for this project are being pursued on several fronts. Gainesville is working in partnership with the U.S. Environmental Protection Agency through the Brownfield Pilot Program and the Sustainable Communities Program; the U.S. Housing and Urban Development Agency through the EDI Program; the Florida Department of Environmental Protection through the Brownfield Pilot Program; the Florida Communities Trust through the Preservation 2000 Program; the Florida Department of Transportation through the Transportation Enhancement Program; the St. Johns River Water Management District for technical support; the City of Gainesville's Regional Utilities contamination cleanup program; and the City of Gainesville's Stormwater Management Utility Program.

The project includes components, as follow:

Depot Avenue

This element will consist of the reconstruction of approximately two (2) miles of Depot Avenue from SR 331 to U.S. 441. The project is intended to address current safety and capacity issues and includes the construction of two travel lanes, turn lanes, curbs, sidewalks and landscaped medians. Depot Avenue is located adjacent to the existing Depot Avenue Rail-Trail, which is an 8' wide asphalt trail. It alternately connects residential areas, commercial areas, and industrial land uses along its length. The redesign of the road will address these varying conditions and will also provide for the involvement of the neighborhood residents it serves.

Depot Avenue traverses Gainesville from west to east, approximately ½ mile south of, and parallel to, SR 26 (University Avenue). Its western terminus is at the eastern edge of the campus of the University of Florida and its associated student housing development, and its eastern terminus is at SR 331 in Southeast Gainesville. It skirts the southern edge of downtown Gainesville at its mid-point, and its intersection with SR 329 (Main Street) is considered to be the southern "gateway" to Downtown. (Estimated cost is $4 million.)

Transportation center

The City of Gainesville's RTS Transportation Center is located on the north side of Depot Avenue directly south of the core of Downtown Gainesville. The Transportation Center is a multi-modal transportation hub for the Regional Transit System, Greyhound, Amtrak and the Bicycle Commuter Facility. (Estimated cost is $3 million. Partial funding, $1.2 million has been provided by the Federal Transit Agency. Therefore, the City is seeking $1.8 million to complete this project.)

Historic depot

On the south side of Depot Avenue across from the Transportation Center is the Old Gainesville Depot, which has been recently acquired by the City for restoration. The Old Gainesville Depot was built in 1907, and was placed on the National Register of Historic Places in 1996. The City of Gainesville was founded as a rail hub linking Fernandina Beach on the east coast of Florida to Cedar Key on the west

coast in the mid-1800's and uses a train symbol as its official seal. (Fully funded through state and local sources.)

Stormwater park

The City's proposed 22-acre Stormwater Park will serve as the stormwater management facility for the Depot Avenue Project as well as a large portion of the central downtown area. This facility will remove existing contamination, provide for full treatment of stormwater to the property owners in the service area and eliminate the need for future redevelopment in the central area to provide on-site stormwater treatment facilities. Additionally, the stormwater basin is envisioned to provide treatment for some of the underground petroleum plumes that exist in the area. (Total estimated cost is $10 million for construction. Land acquisition is being jointly funded by the Florida Communities Trust and the City of Gainesville. Design services are jointly funded by the U.S. EPA, Florida DEP and the City of Gainesville. Partial funding is available from the City's stormwater utility and the Florida Department of Transportation.)

Sweetwater branch project

The City of Gainesville is seeking $1.5 million in funding assistance for a $2 million stormwater management project intended to remove 90 percent or more of the sediment and debris from the Sweetwater Branch creek flow preventing those undesirable materials from entering the Paynes Prairie Preserve, thereby helping to insure and protect the Florida Aquifer as the major source of drinking water for the State of Florida.

The Sweetwater Branch basin contains approximately 1,710 acres, and is located mainly in the southeast central portion of the City of Gainesville. The outfall from this basin discharges into Paynes Prairie, a State-owned preserve and park system, where the creek flow is directed into the Alachua Sink. The Alachua Sink is a natural sinkhole that drains directly into the Florida aquifer.

The Florida Aquifer provides the majority of drinking water to Florida's residents and has a direct impact on the Florida Everglades. In addition, many domestic water wells are used to obtain water from surficial and intermediate aquifers in the Gainesville area.

The Sweetwater Branch drainage basin contains urban, commercial, industrial, and residential area stormwater runoff. Because the Sweetwater Branch runs through some of the oldest portions of Gainesville, most stormwater runoff is directly discharged into the Branch with very little flooding attenuation or pollution loading reduction. In addition, there is insufficient undeveloped land available to accommodate stormwater management facilities except for the area very near the Paynes Prairie outfall.

Pollution reduction of the Sweetwater Branch surface waters before entering the Paynes Prairie Preserve will assist in the re-establishment of the Preserve's natural aesthetics and re-establishment of the natural ecological systems of the Preserve, in addition to providing protection for a major source of drinking water. The runoff also has the potential to negatively impact threatened and endangered wildlife such as the American Bald Eagle, the Woodstork, the Florida Sandhill Crane and the Southeastern American Kestral. In summary, the situation has created a concern amongst environmentalists, business leaders, and concerned citizens throughout the region that Paynes Prairie and the Florida Aquifer are being compromised.

With this in mind, the City of Gainesville, Alachua County, the Florida Department of Environmental Protection, the St. Johns River Water Management District, and local citizens are all seeking a comprehensive ecosystem management solution to the problem of stormwater runoff from downtown entering Sweetwater Branch, Paynes Prairie and the Alachua Sink.

The project devised by these groups would reduce or eliminate the sediment, debris, nutrients and general pollutants currently being discharged into Paynes Prairie and eventually the Florida aquifer from the Sweetwater Branch Creek.

Current projections are that the project would consist of the following three components:

—the purchase of undeveloped property in the vicinity of State Road 331 and Sweetwater Branch;

—the construction of maintainable sediment and debris removal systems; and

—the construction of maintainable nutrient removal systems.

Removing all pollutants at the discharge end of Sweetwater Branch would cost at least $14-$20 million. Smaller projects upstream of the Prairie have been initiated at the local level. Expenditures of about $2 million are identified for three such smaller projects: (1) the Duck Pond, (2) the Baffle Box, and (3) the Downtown (a Brownfield Area) Stormwater Facility. These smaller projects are designed to deal

with specific subbasins and water quality issues. The current projects now planned utilizing local resources will only clean up parts of the basin. Considerable flow and accompanying pollution still will go through to the Prairie. An additional facility is needed to clean up the rest of the flow.

An in-depth engineering analysis of the creek system, property topography, associated wetlands, and other pertinent factors would be accomplished to determine the optimum and appropriate scope of property purchase and facilities construction. The City is prepared to pay some of the cost for this analysis, and has received a $500,000 grant from the U.S. Environmental Protection Agency, but we are simply unable to bear the entire burden. As a result, we request that the Subcommittee appropriate $1.5 million to assist our efforts.

The requested federal funds, if awarded, will be used by the City to secure the necessary property rights and to construct the facility. Once the project construction is complete, Gainesville's Stormwater Management Utility, a public utility, would provide the required annual operating and maintenance funding, and no further federal maintenance funds would be needed.

In closing, federal support is critical for each of these initiatives. As a result, we respectfully request that the Subcommittee give our requests every consideration throughout the fiscal year 2001 appropriations process.

PREPARED STATEMENT OF ALACHUA COUNTY, FLORIDA

Mr. Chairman: Thank you for allowing the Alachua County Board of Commissioners to submit testimony before your Subcommittee regarding three critical projects: (1) Partners for a Productive Community Enhancement Initiative (2) the Greenway Farmland Preservation (Emerald Necklace) and (3) the Regional Air Quality Monitoring Demonstration Initiative.

PARTNERS FOR A PRODUCTIVE COMMUNITY ENHANCEMENT INITIATIVE

Alachua County is seeking federal funds to assist with expanding its collaborative neighborhood revitalization program into the rural community of Archer. This collaborative program includes the Alachua County Community Services Department, Office of Code Enforcement, Alachua County Sheriff and Alachua County School Board. The Alachua County Commission requests $2.3 million in federal funding to expand this successful revitalization model to other neighborhoods. The process would include additional community needs assessments, increased educational, training and job readiness opportunities, mobilization of community resources and community empowerment for sustainability of neighborhoods throughout Alachua County. The funding will also support additional Sheriff's deputies at a level needed to provide adequate and intensive law enforcement, and community policing activities to the expanded Partners' areas. Following is a background on this initiative.

In 1993, the Sheriff's Office made a request to the Board of County Commissioners for assistance due to the spiraling crime rate in southwest Alachua County. The Sheriff's Office reported that 57 percent of its 911 calls came from an area that had only 3.2 percent of the population. This area was identified as consisting of the five following neighborhoods: Clayton Estates, Majestic Oaks, Tower Oaks, Cedar Ridge and Sugarfoot. In addition to the disproportionately high crime rate, it was determined that there were inadequate community services, a high percentage of absentee landlords, a lack of concern by most residents, in concert with the physical appearance of the neighborhoods steadily deteriorating.

In fiscal year 1994, the Alachua County Commission provided funding for a Program Manager to staff the Partner's for a Productive Community (PPC) Program. The PPC was launched as a strategic planning effort based on three goals: to establish neighborhood-based services, to develop public/private partnerships and to focus on prevention. The success of this project depended upon the coordinated efforts of the Sheriff's Office, the Courts and the Department of Community Services. The objectives of the Sheriff's Office were to reduce the number of calls from the area and to develop trusting relationships with the residents interested in improving their community. The objectives of the Courts were to help with the swift prosecution of cases brought forth and to increase personnel in key areas. The objectives of the Department of Community Services through a Program Manager were to develop and implement a needs' assessment, to assess social services needs in accordance with the results of the assessment, to develop a community council comprising owners, tenants and property managers. This project would be a multi-agency strategy to stabilize, revitalize and sustain these five (5) neighborhoods.

Community improvements

Since fiscal year 1995 accomplishments include: free community day care for 75 children, 30 community day care slots, eight (8) in-home day care slots, establishment of a medical clinic provided by the Alachua County Health Department, the creation of 30 new jobs by the Early Progress Center, reduction in 911 calls from 57 percent to 14 percent of total calls, the overall increases in property values for four (4) of the five (5) neighborhoods. The provision of seasonal recreation programs for children in the targeted communities by the Y.M.C.A. In 1996 the PPC received the National Association of Counties' Achievement Award in recognition for distinguished and innovative contributions to improving and promoting county government. Additionally, an award was received from the League of Women Voters for outstanding community service.

New activities include community forums on landlord and tenant issues, welfare reform and subjects determined to be germane in the effort to educate and revitalize this community. Steps have been taken to establish 4–H Clubs in the communities to provide positive learning and character building experiences for youth. It is also being proposed to implement adult literacy classes, computer training, General Education Diploma preparatory training and a One Stop Program to provide employment opportunities. A community health fair was conducted with numerous agencies involved in providing immunizations for area children as well as the dissemination of information on health and safety issues. Three major and three mini neighborhood cleanups were completed. Through diligent efforts of the Office of Codes Enforcement, Alachua County government has reduced the number of abandoned and vandalized buildings from five to two.

The sustaining factor within this community is the formally organized Partner's for a Productive Community Council. The Council is the guiding force that deals with issues and determines unmet needs. It has become incorporated and has received a donation of space (estimated to be worth $5,000.00 per year) which will house the organization as well as the Center for Community Services.

Finally, in December 1999, Alachua County received Official Recognition (OR) from the Executive Office of Weed and Seed for two of the neighborhoods being served by the Partners for Productive Communities Program. There is no funding associated with this recognition. This OR will further strengthen the long-term efforts to improve the quality of life in these neighborhoods.

Rural component

The County seeks federal funds to expand the partners initiative into the rural community of Archer, located approximately 17 miles south of downtown Gainesville. Archer has a population of 6,348 of which 16 percent fall below the poverty level and 2,452 of its citizens live within the city limits, the remainder live in the rural surrounding area of Archer.

The city has a mayor and city council, one elementary school, fire, emergency rescue and police are contracted from Gainesville/Alachua County. There are two public housing communities. They have a small dated community center used as a senior citizen meal site. An unmanned sheriff's substation, several businesses employing between 30 and 50 persons each. Farming is still a major business in this area. Many of the citizens travel into Gainesville for employment.

There is no doctor or medical facility, no public transportation, recreation for teens is very limited and no social service outreach.

Crime is high for a community it's size. In 1999 the Alachua County Sheriff's Office (ACSO) answered 2,665 calls for service, 352 general incidents' reports were written, 99 citations issued and 26 arrest warrants executed. In the drug eradication effort, one search warrant and a two undercover operation were conducted, resulting in 16 arrests and three sworn complaints. The net effect of ACSO's narcotic enforcement in the Archer area resulted in the seizure of 276 cannabis pants, 18,8564 gr. of commercial cannabis, 16.3 gr of crack cocaine and 25.5 gr. and of powder cocaine with a total street value of $428,744.

Of the dispatched calls, 30 were assault and battery and five were sexual batteries of which half involved minor children, one-armed robbery and one robbery. The largest number of dispatched calls was for theft, totaling 558.

This community has very few resources and an extremely high crime rate resulting in this community being considered as a community at risk. With federal funding, this community could provide community health care, minimum public transportation to and from Gainesville, social service outreach, after school tutoring and recreation for its youth, along with education employment opportunities, using the partnership concept as a model developing existing resources from the Gainesville/Alacua County into the Archer Community.

GREENWAY FARMLAND PRESERVATION INITIATIVE (EMERALD NECKLACE)

Alachua County has embarked on a local land conservation program, which the County Commission has selected as one of its highest program priorities for 2000. A separate citizen-initiated referendum called Alachua County Forever is anticipated to raise $17 million from ad valorem property taxes to match federal and state land acquisition funds. The County's Land Conservation Advisory Committee (appointed in November, 1999) is finalizing a system to prioritize which local lands should be conserved, and is creating the tools to accomplish these goals. Eastern Alachua County has been included in the St. John's River American Heritage River designation, with three suggested projects. A number of eco-tourism and recreational opportunities are being pursued to capitalize on the County's protection of its natural areas. The County, in cooperation with the City of Gainesville, is actively seeking federal and state partnerships to achieve its land conservation goal of an emerald necklace comprising gems of conserved natural areas throughout this part of "the Real Florida."

Land acquisition priorities.—Alachua County has five large-scale projects (5000+ acres) on Florida's Conservation and Recreation Lands (CARL) acquisition list. These include:

—Paynes Prairie additions (a large freshwater wetland and watershed, operated as a state preserve)

—San Felasco Hammock additions (a mature hammock and sandhill forest, with ravines)

—Watermelon Pond (an upland sandhill and scrub forest with important ephemeral wetlands)

—Newnans Lake (a diverse flatwoods forest surrounding a lake with declining water quality)

—Lochloosa Forest (a flatwoods forest, largely in commercial production surrounding two large lakes)

Each of these CARL projects has outstanding land acquisition needs, with state matching money available from Florida Forever (formerly Preservation 2000). The lack of a local source of matching funds has hurt the ability of Alachua County's projects to compete favorably with other local governments which have local land conservation programs, so Federal matching funds (either grants or loans) would greatly assist in finishing the acquisition of these lands before development further fragment them. If the Alachua County Forever referendum passes in November 2000, the County will have a source of matching funds. Federal agencies could help by "challenging" the County with the promise of matching funds for projects of national significance, such as Paynes Prairie.

For this initiative, the City of Gainesville and Alachua County have identified three project areas. The first is Newnan's Lake, a large lake in a semi-wild setting with mysteriously increasing eutrophication, yet spectacular recreational and scenic resources. Specific projects requiring funding assistance include: investigations into water quality issues, remedying muck build-up (possibly through a draw-down or mechanical removal), land acquisition (including less-than-fee opportunities with large forestry companies), a multi-user trail system circling the lake and connecting two existing rail-trails, and the designation and enhancement of an informal, but exceptional canoe trail connecting Newnan's and Orange Lake down Prairie Creek and the River Styx. The St Johns River Water Management District is a willing partner, having made substantial commitments in the past and with expressed interest in continuing to conserve the lands and waters of this area, while enhancing public access.

The second project is to clean-up and mitigate Sweetwater Branch, and its impacts on Paynes Prairie (a National Natural Landmark) as well as the Floridan Aquifer. As one of the major watersheds flowing through eastern Gainesville, this creek has all the problems of urban stormwater and wastewater outfall into natural areas. While substantial funds have been received from federal sources for the Depot Stormwater Park, the cost of cleaning up this brownfield area is considerably more than the local governments can handle.

The third project is to clean-up and mitigate impacts to Hogtown Creek, the major watershed in western Gainesville. The City and State have acquired over $3 million of property comprising the Hogtown Creek Greenway, however funds are needed for development of recreational trails, and for sedimentation control. We are seeking $10 million in federal support.

REGIONAL AIR QUALITY MONITORING DEMONSTRATION INITIATIVE

The Board of County Commissioners has made protecting the County's air quality a priority and has implemented various initiatives to examine the state of the County's air quality and to determine pro-active measures to reduce air pollution.

Many of the BoCC's air quality initiatives are contained within the Alachua County Air Quality Work Plan. Approved in November, 1998 and subsequently modified, the plan is a comprehensive blue print for examining, protecting and improving the air quality in the County.

The February 18, 1999 Alachua County Air Quality Summit formally introduced the Air Quality Work Plan to the public. The event, attended by over 120 people, addressed public concerns over air quality and explored strategies to ensure clean air in the future. The summit also introduced the public to Quality Commission (AQC), which was newly appointed in December 1998.

The AQC (the focal point of the work plan) is a nine member blue ribbon panel of scientists, engineers and medical professionals and is charged with reviewing scientific material and offering recommendations to the BoCC regarding the protection of air quality and human health. These recommendations, due in September, 1999, will assist the County in setting priorities and will serve as the foundation for future air quality protection efforts.

The plan also directed the County's Environmental Protection Department (ACEPD) conduct a PM2.5 study utilizing portable monitors to better define distribution and concentrations in Alachua County. Since being approved in March, 1999, the study's scope has expanded to include the analysis of PM10 and pollutant gases (ozone, SO_2, NO_X). The expansion was due in part to the generosity of the EPA, FDEP, the University of Florida, City of Gainesville, and a local environmental engineering firm donating equipment and their expertise for a combined value of over $100,000. ACEPD continues to seek partners and has had preliminary discussions with a local middle school to assist in the public education component of the study.

Apart from traditional educational tools, such as brochures, presentations, and newspaper articles, ACEPD in conjunction with the University of Florida is developing an innovative educational website for the study that will display ambient air monitoring data in "real-time." The website, which will be continually updated, will feature the data from two sets of monitors that will sample continuously for NOx, SO2, and ozone. This pollution data along with meteorological data will be displayed in an easy to understand graphical format known as a pollution rose. The pollution rose will not only graphically show the concentration of pollutant, but also the direction from which it came. Pollution roses will be displayed for the total operating period, the previous 24 hour period, and selected occurrences.

Yet another component of the work plan is Alachua County's participation in the Cities for Climate Protection Campaign (CCP). The CCP aims to reduce emissions from two primary greenhouse gases, CO2 and methane, which are linked to global warming. To participate, the CCP requires counties or municipalities to undertake the following tasks: 1) a base year emission analysis of the sources and quantity of greenhouse gas emissions; 2) a forecast of emissions growth to the year 2005 or 2010; 3) adoption of an emission reduction target; 4) an action plan outlining activities that will achieve reduction targets; and 5) implementation of the action plan. Alachua County is currently in the process of developing a greenhouse inventory and emission reduction strategies.

Also of interest, ACEPD has been awarded an environmental justice grant to perform a multi-faceted study for the Depot area located in downtown Gainesville. One component of the proposed study will focus on outdoor air quality. Specifically, ACEPD proposes to set-up portable particulate matter monitors in the area to measure the impact from area industry. The Depot area is home to an EPA brownfield site, 2 concrete batch plants, one recycling facility, and an electric power plant. All of these facilities are within a ¼ mile of the area and produce large amounts of dust and/or emissions. The study will measure the community's exposure and propose mitigation measures.

Still in the preliminary planning stages is a proposed initiative to examine environmental risks surrounding the County's schools. Along with examining risks posed by contaminated soil and water, the initiative will focus on identifying industries near schools that have discharges into the environment or have the potential to have major accidental releases. Once these facilities are identified, an action plan will be developed between the County, facility, school, and fire and police departments. The action plan will seek to educate these entities about the environmental risks that the schools face as well as what to do in an emergency.

Also in the planning stages, is an initiative to combat the problems due to urban sprawl. In conjunction with the Planning Department, ACEPD is investigating various approaches whereby air quality improvements can result from innovative local land use decisions and transportation activities. Thus promoting clean air and economic vitality.

Finally, the anticipated outcome of all these efforts is a better understanding of the surrounding air quality and the development of a local capacity to improve air quality. To that end, the County is in the initial stages of developing a pro-active air program and seeks $1 million in federal assistance.

We hope you will find these critically important initiatives worthy of your support. Thank you for your consideration.

PREPARED STATEMENT THE AMERICAN MUSEUM OF NATURAL HISTORY

Mr. Chairman and Members of the Subcommittee. My name is Ellen Futter, and I am president of the American Museum of Natural History. I very much appreciate the opportunity to submit testimony in support of the National Aeronautics and Atmospheric Administration [NASA] and the National Science Foundation [NSF], and to present a summary of our recent accomplishments and our planned fiscal year 2001 initiatives and objectives. Most of all, I want to thank this Subcommittee for all the contributions it has made to scientific research and education in this nation and at the American Museum.

This Subcommittee, with a purview that includes the NSF and NASA, plays a pivotal role in our nation's science and education enterprises. The future of our research and development; our science, math, engineering, and technology education; and our 21st century workforce in many respects rests here.

The National Science Foundation under skilled leadership is pursuing key initiatives that include information technology research, biocomplexity, research on learning, and the 21st Century Workforce. These initiatives, as well the core research and education programs, require funding at the increased levels recommended in the budget proposal.

NASA, under its bold leadership, captures the national imagination and invigorates the thirst for exploration into unknown realms. Every day at the Museum we see evidence of NASA's power to ignite the public's imagination. To continue to expand understanding of our planet, our solar system, and our universe, investment in NASA is vital to remaining strong. We urge the Subcommittee to fund NASA at the level needed for it to pursue its goals in cutting-edge R&D, breakthrough technologies, interagency partnerships, and educational excellence.

Let me now review for you our accomplishments and plans at the American Museum.

ABOUT THE AMERICAN MUSEUM OF NATURAL HISTORY

Founded in 1869, the American Museum of Natural History [AMNH] is one of the nation's preeminent institutions for scientific research and public education. Throughout its history, the Museum has pursued its joint missions of science and education, of examining critical scientific issues and educating the public about them. Its audience of nearly 4 million total visitors a year—approximately half of them children—is one of the largest and most diverse of any museum in the country. It is renowned for its exhibitions and collections, which serve as a field guide to the entire planet and present a panorama of the world's cultures. Museum collections of some 32 million natural specimens and cultural artifacts provide an irreplaceable record of life on earth. Museum explorers and scientists have pioneered discoveries and offered us new ways of looking at nature and human civilization. The Museum's power to interpret wide-ranging scientific discoveries and convey them imaginatively has inspired generations of visitors to its grand exhibition halls and educated them about the natural world and the vitality of human culture.

NASA PARTNERSHIP

In 1997 the American Museum embarked on a groundbreaking new initiative when, under the leadership of Congress, it joined in partnership with NASA to advance our shared goal of fostering scientific literacy nationwide. This partnership has been extraordinarily fruitful, and it has helped to create a unique national resource built with private funding catalyzed by the federal contribution. Together the American Museum and NASA are exploring the frontiers of science and reaching millions of Americans with our science literacy and education efforts. We have established the National Center for Science Literacy, Education, and Technology and

partnered in life and microgravity, space, and earth sciences research. Together, we are asserting national leadership in science education, spotlighting the excitement and awe of research and exploration for the millions of Museum visitors, and we are now poised to reach millions more.

Rose center for earth and space

For dramatic testimony to the benefits and power of the AMNH–NASA partnership, I invite you to visit, on site or online, the American Museum's new Rose Center for Earth and Space. In February 2000 the Museum began one of the most exciting chapters in its long and distinguished history of advancing science and education with the opening of the Rose Center. Greeted with popular and critical acclaim and attendance figures exceeding all projections, this spectacular new Center brings the most up-to-date astrophysics and earth science information to the public. It includes a newly rebuilt and updated Hayden Planetarium, where visitors journey among the stars and planets in our own and in other galaxies; and the Lewis B. and Dorothy Cullman Hall of the Universe, where interactive technology and participatory displays elucidate important astronomy and astrophysics principles.

The centerpiece of the Rose Center is an 87-foot-diameter sphere housed in a giant glass cube. The top half of the sphere contains the Hayden Planetarium's state-of-the-art Digital Dome, the world's most technologically advanced sky theatre and largest venue for displaying astrophysical data. It showcases the NASA-supported Digital Galaxy Mapping Project—a scientifically accurate three-dimensional map of the universe created by the National Center team working in concert with NASA scientists and engineers. With its one of-a-kind Zeiss Mark IX Star Projector and display system, it takes visitors on scientifically accurate virtual journeys through our solar system and out among stars, visualizing data from NASA, including the Hubble Space Telescope, and from other collaborators. In the bottom half of the sphere, the Big Bang offers a multisensory, multimedia presentation of this phenomenon.

Adjoining the Rose Center is the new Gottesman Hall of Planet Earth [HoPE], which opened in June 1999 and focuses on how the Earth works and its geologic history. Built around rock samples and models gathered from around the world, the hall explores such questions as how the Earth has changed though time; why ocean basins, continents, and mountains exist; and what causes climate change. The Hall of Planet Earth in turn leads to the recently opened Hall of Biodiversity. Together the new Planetarium and halls provide visitors a seamless educational journey from the outer edges of the universe to the processes that shape the Earth, to the diversity of our planet's life and cultures.

Throughout this trio of new halls and Planetarium, innovative exhibits attest to the accomplishments of the Museum-NASA partnership. For example, displayed in the Hall of Planet Earth are the "black smokers," or sulfide chimneys retrieved from the deep ocean floor by Museum scientists and educators in an expedition with the University of Washington.

A highlight in the halls are the National Center's electronic Science Bulletins. As companion to the BioBulletin in the Hall of Biodiversity, this year the National Center launched the HoPE's GeoBulletin and the AstroBulletin in the Hall of the Universe. These video reports feature breaking global and space news in high definition wall displays. The Earth Event Wall broadcasts news on earth events such as earthquakes, floods, and atmospheric conditions as they occur. The dramatic 13.5-foot-long Universe Wall showcases NASA news and data, displaying up-to-date images and events in space, including a log of current NASA missions. Nearby touch-screen computer kiosks enable visitors to delve more deeply into the stories. All Science Bulletins are also accessible to visitors worldwide on the Museum's web site.

National center science bulletins and families of products

The exhibit halls, however spectacular, do not tell the entire story of the benefits of our NASA partnership. Since its inception the National Center has created 70 different web sites; CD–ROMS; books; magazines for students, teachers, parents, and families; exhibition guides, and more. Fueled by our NASA collaborations, we have been able to forge partnerships with Time For Kids, Discovery, Classroom Connect, Tom Snyder Productions, and others.

These educational products are reaching millions. For example, through our partnership with Classroom Connect, a million middle schoolers have followed expeditions to Africa, the Galapagos, Asia, and now the Southwest. More than 750,000 adults have traveled in online expeditions through our partnership with Discovery Channel Online. Two million students nationwide receive science magazines through our partner, Time For Kids.

One of the National Center's most exciting initiatives targets teachers—our new online courses, Seminars on Science, offered for the first time this spring in partnership with Connected University, will provide teachers with unprecedented access to authentic science investigations. The National Center also has been creating inquiry-based science curricula, aligned with the national standards, that take place in class, in the field, and online. For instance, Biodiversity Counts sends kids into their own backyards and neighborhoods to collect data and share it online. It has already been piloted in 115 schools in 40 states. And our award winning Science Seekers, created in partnership with Tom Snyder Productions, combines multimedia, cooperative learning, and hands-on activities to teach core science content and technology tools.

Science partnership

Scientific research is also part of the full story of the Museum's partnership with NASA, as we are working together to advance our shared goal of discovering ways to understand the earth, its biodiversity, and the history of life in the universe. At the Museum, as at NASA, much of our scientific effort now takes the form of interdisciplinary research and exploration. Following last year's appropriation, our partnership with NASA has expanded into four key areas: incorporation of satellite technology into biodiversity conservation; DNA sequencing for conservation; improved collections that include super-cold tissue storage for microbial and molecular biology; and digital imaging for improved perception of specimens and dissemination.

Our Museum researchers are progressing on a number of scientific frontiers. Our Center for Biodiversity and Conservation is adapting GIS [Geographic Information System], remote sensing, and land-cover processing methodology for conservation and training in Madagascar and other biodiversity "hot spots." Our systematic biologists are drawing national attention with the powerful parallel computing facility they built from scratch; and our molecular systematists are working at the forefront of the analysis of DNA sequences for evolutionary research. We are also building the database of and protocols for our unique frozen tissue collection, and digitizing and databasing our world renowned paleontology collections.

Concurrent with the Rose Center, the Museum has also launched a vigorous research program in astronomy and astrophysics that now includes eight scientists. The Planetarium's Digital Dome provides them an assemblage of the most powerful and sophisticated astronomy visualization tools ever designed and full-dome, three-dimensional views of massive datasets. At an upcoming international conference, Museum astrophysicists will introduce the international scientific community to the Rose Center and the Hayden Space Theater's capacity for three-dimensional "mining" and display of astrophysical data.

Fiscal year 2001 agenda

We now seek to broaden and deepen our educational and scientific partnerships with NASA and to fully realize the power and reach of the new Rose Center. In our agenda for the coming year, we propose to expand our shared investments in interdisciplinary research in emerging areas, particularly astronomy and astrophysics projects that fully explore the Rose Center's visualization and modeling capacities. We plan an aggressive computational and observational astrophysics program. We also seek through the National Center to expand our NASA collaborations to capitalize on the Digital Dome's unique display system to create new presentations, and to enhance the agency's public outreach by featuring NASA news and discoveries. We propose to develop interactive educational modules for the Hall of the Universe; as well, we plan to expand the distribution system for the Digital Galaxy's astounding compilation of information to an even broader audience of informal science education institutions, teachers, students, and the general public.

A critical ingredient to the success of the Museum's research and education programs is access to ultra-high speed communications networks and new technologies. Our current uses of these technologies range from computational astrophysics to the production of high definition, real time displays in the exhibition halls. We seek to deepen our NASA collaborations and data exchange by upgrading our access to high speed networks and advanced research and education applications.

Through the National Center we plan to develop, evaluate, and distribute additional innovative inquiry-based curricular products. We will also continue to focus on professional development, creating enhanced online science courses and technology learning tools targeted to teachers. In addition, we propose to move into advanced development phases for the Science Bulletins launched under prior NASA agreements and to expand systematic distribution to partner institutions throughout the country. In the BioBulletin, GeoBulletin and now the AstroBulletin, we propose

to add content, improve data structure, and import large datasets even more rapidly so as to present the most current science developments and NASA data.

As we seek to realize the full potential of the Rose Center, let me illustrate its power and reach. The American Museum's audience includes nearly 4 million total visitors each year, approximately half of them children. With the opening of the Rose Center, we project up to one million more annual visitors. Now, add our virtual visitors to the National Center and AMNH web sites. Last year the web sites had more than 31 million hits and several million visitors; we project significant increases ahead. The Museum-NASA partnership therefore seems poised in the years ahead to reach a combined on site and online audience that could reasonably approach 10 million children, adults, families, teachers, and communities. This is a national and international museum audience like none other.

This is the moment to maximize the shared investments in the American Museum and the Rose Center. We now seek $7 million to broaden and deepen our educational and scientific partnerships with NASA, and to fully realize the Rose Center's potential. The federal participation to date has fueled our successful fundraising efforts, enabling the Museum to more than match the federal investment with contributions from private donors, foundations, and corporations. We are confident that with continued congressional leadership, we will be able to continue to leverage federal investment so favorably.

The American Museum is deeply appreciative this Subcommittee's support. Thank you again, Mr. Chairman and Members of the Subcommittee, for the opportunity to submit this testimony to you.

PREPARED STATEMENT OF FLORIDA STATE UNIVERSITY

Mr. Chairman, I would like to thank you and the Members of the Subcommittee for the opportunity to submit testimony before this Committee. I would like to take a moment to briefly acquaint you with Florida State University.

Florida State University is a comprehensive Research I university with a liberal arts base. The University's primary role is to serve as a center for advanced graduate and professional studies while emphasizing research and providing excellence in undergraduate programs. Faculty at FSU have been selected for their commitment to excellence in teaching, for their ability to perform research and creative activities, and for their commitment to public service. Among the faculty are numerous recipients of national and international honors, including four Nobel laureates and eight members of the National Academy of Sciences. Our scientists and engineers do excellent research, and they often work closely with industry to commercialize their results. Florida State ranks third this year among all U.S. universities in revenues generated from its patents and licenses, trailing only Columbia University and the entire University of California system. Having been designated as a Carnegie Research I University several years ago, Florida State University currently exceeds $100 million per year in research expenditures. With no agricultural or medical school, few institutions can match our success.

Florida State attracts students from every county in Florida, every state in the nation, and more than 100 foreign countries. The University is committed to high admission standards that ensure quality in its student body, which currently includes some 192 National Merit and National Achievement scholars, as well as students with superior creative talent. We consistently rank in the top 25 among U. S. colleges and universities in attracting National Merit Scholars. At Florida State University, we are very proud of our successes as well as our emerging reputation as one of the nation s top public universities. Support for the budget of the National Science Foundation

SUPPORT FOR THE BUDGET OF THE NATIONAL SCIENCE FOUNDATION

I want to discuss briefly with you the fiscal year 2001 budget request of the National Science Foundation pending before you today. I am certain that you know the many reasons why this small agency is so vitally important to our Nation. It provides the foundation in all the natural and physical sciences and engineering research that feeds the breakthroughs at NIH and DOD. An eloquent advocate of NSF s important role was Harold Varmus, who felt strongly that NIH could not thrive without a healthy and vigorous NSF. Many of the instruments developed in scientific arenas find themselves into the laboratories of those doing medical research. The levels of NSF support in universities for the physical sciences and engineering are comparable to support provided to DOD in its 6.1 and 6.2 accounts. DOD activities are heavily dependent on this type of support from NSF.

NSF is seeking a 17 percent increase this year, the largest increased proposed for the agency in my memory and certainly larger than the increased that I supported when at the NSF. Were this NIH, few would have any concern about endorsing such a budget. However, NSF does not have the medical hook that NIH has to garner its support. But what the NSF does is so important to our universities and to moving this Nation forward—whether in areas like telecommunications and information technologies, in genetic and biological research, in developing new composite material and substances, or a wide range of scientific applications that lead to new industries, new jobs, and additional taxes that repay this federal investment many times over. Many economists have concluded that R&D is the best investment we can make as a Nation. NSF is clearly one of the best places to put those dollars.

There's another reason and a somewhat parochial one that I am asking for such special consideration and treatment for the NSF budget. FSU ranks 14th among American public universities in support from NSF. Most significantly, however, our National High Magnetic Field Laboratory (NHMFL) which is located at FSU and has additional sites in Gainesville, FL and in Los Alamos, NM, has recently submitted its second five-year renewal proposal to NSF. As you may remember, NSF to move the facility from MIT in Cambridge, Massachusetts, to Tallahassee in the very late 1980s relocated the NHMFL to Florida by a bold decision. That decision, which this Subcommittee and the NSF have strongly supported, has turned out to be an excellent decision, as we have seen the Laboratory grow to clearly the best in the world. The Laboratory has grown dramatically over the past ten years in facilities, unique instrumentation, and the number of users who come to Tallahassee from around the Nation and the world to gain access to the incredible resources of the facility.

Our renewal proposal that has been submitted to NSF asks for $173.6 million over the next five years with the new funding beginning in fiscal year 2001.

We do not wish any specific earmarking in the NSF budget even for this very important national resource but because NSF has many such opportunities in which to invest their resources, I do request that you give serious consideration to the full increase requested by the NSF in their fiscal year 2001 budget pending before your Committee.

Mr. Chairman, let me briefly share some additional information about our efforts and achievements at our Magnet Laboratory and also about a project we are pursuing through NASA. National High Magnetic Field Laboratory

NATIONAL HIGH MAGNETIC FIELD LABORATORY

The National High Magnetic Field Laboratory at Florida State University was established in 1991, and has quickly become the preeminent laboratory of its kind in the world and the only such research facility in the Western Hemisphere. The state-of-the-art facilities provide the highest magnetic fields available anywhere and supports magnet related research in all areas of science and engineering, including biology, biomedical, chemistry, geochemistry, bio-engineering, materials science, and physics. The National High Magnetic Field Laboratory also represents a unique federal/state partnership between the National Science Foundation and the State of Florida through funds largely to FSU.

The laboratory is a dedicated national users facility and open to all qualified researchers under a peer-review process that allocates research time on the unique array of magnets and instrumentation. User activity across all disciplines has grown 60 percent during the past five years. The breath of the National High Magnetic Field Laboratory s programs is not duplicated at any of the other laboratories in Europe and Asia. Recently, the laboratory commissioned the world s highest field and most powerful magnet, nearly one million times the earth s magnetic field, which promises to open new science frontiers. The innovative magnet technology used to fabricate this complex magnet system was developed in Tallahassee in cooperation with the private sector.

NATURAL HAZARDS MITIGATION CENTER CONSORTIUM

This project is a joint initiative with several academic institutions including the University of in Alabama, Georgia Tech, Louisiana State University and Mississippi State University. This initiative will allow the above universities to work together to conduct research as well as provide professional and public education to citizens, state governments and Federal agencies in natural hazard issues. Examples of research will include risk assessment for natural hazard threats as well as providing forecasts to farmers and agricultural interests relative to planting and irrigation decisions; updating land-use and building codes; taking into account disaster risk in investment decisions; estimating the true economic costs of natural disasters; and

undertaking cost/benefit analysis of disaster mitigation policies. It recognizes the impact of the information technology revolution on the United States and creates a virtual center to study the aspects of all types of natural disasters including hurricanes, tornadoes, forest fires, harmful algal blooms, floods, droughts, and other unexpected natural disturbances. Coordination of research activities across the various sites will be done via the Internet. The combined resources and visibility of the proposed partnership will provide the opportunity for shared resources, technology and expertise to obtain successful results.

We are requesting $2 million to develop and implement this initiative. There will be increasing involvement with state agencies and private businesses as research progresses.

Mr. Chairman, these are just a couple of the exciting activities going on at Florida State University that will make important contributions to solving some key problems and concerns our Nation faces today. Your support would be appreciated, and, again, thank you for an opportunity to submit these views for your consideration.

PREPARED STATEMENT OF THE AMERICAN LUNG ASSOCIATION AND THE AMERICAN THORACIC SOCIETY

MAGNITUDE OF LUNG DISEASES

Lung disease is the third leading cause of death in the U.S., responsible for one in every seven deaths. More than 30 million Americans suffer from a chronic lung disease. Lung diseases cost the U.S. economy an estimated $89.1 billion annually. Lung diseases represent a spectrum of chronic and acute conditions that interfere with the lung's ability to extract oxygen from the atmosphere, protect against environmental of biological challenges and regulate a number of metabolic processes. Lung diseases include: emphysema, chronic bronchitis, lung cancer, tuberculosis, pneumonia, influenza, sleep disordered breathing, pediatric lung diseases, occupational lung diseases, sarcoidosis and asthma. Nearly all of these lung diseases are severely impacted by air pollution.

The lungs are in constant contact with the outside world interfacing with 8,000 to 9,000 liters of air as we breathe each day. How well or how poorly our lungs perform is contingent on the quality of air around us, making the impact of air pollution inescapable. Air pollution remains a primary contributor to a high prevalence of respiratory diseases.

For the past 30 years, the American Lung Association and the American Thoracic Society have conducted scientific, public health and educational programs to fight air pollution and to improve the quality of air we breathe. We remain strong supporters of the Clean Air Act and its amendments. We can attest to the significant impact the Clean Air Act has had upon cleaning our nation's air and allowing us all to breathe a little easier.

While the nation has made great strides in improving air quality, many areas across the nation experience unhealthy levels of air pollution many days each year. The EPA recently reported that in 1997, approximately 59 million American lived in counties that did not meet the current federal air pollution standards. The number of people living in non-attainment counties jumps to 107 million when the revised air quality standards are used. Tens of thousands of Americans still die prematurely each year from complications associated with air pollution exposure.

OPPOSE CLEAN AIR ACT LEGISLATIVE RIDERS

The American Lung Association and the American Thoracic Society are greatly concerned that the VA–HUD appropriations bill has become a target for substantive legislative riders seeking to change laws that protect the public health and our environment. Often these riders seek to delay the implementation of clean air standards that protect our clean air or reduce the level of protection to our environment.

In particular, the Clean Air Act has become the target of narrow changes attached to EPA's appropriation. Actions taken by the EPA to improve air quality enjoy broad public support. A recent poll conducted by the American Lung Association found that a majority of Americans support cleaner burning fuels and cleaner burning cars. In the same poll, 60 percent of respondents felt that the air quality was worse than it was ten years ago. Clearly, Americans are aware and concerned about air quality issues. We strongly urge this committee to respect the concerns of the American people by keeping the bill free of riders that would harm EPA's efforts to continue progress toward to achieving cleaner air.

THE EPA BUDGET

While we are encouraged that the President's budget proposes an overall increase in funding for Clean Air Programs, we are nonetheless concerned that the Administration's budget also cuts the EPA budget $136 million from fiscal year 2000. We are also concerned with the reduced funding for EPA's Clean Water Programs. The American Lung Association and the American Thoracic Society see important interactions between EPA's Clean Air, Water and Land programs.

We are also concerned that the Administration has recommended a 12.8 percent cut in EPA's Science and Technology programs. We are particularly concerned that the President's budget proposes a 16.4 percent cut in Clean Air Activities and a 14.8 percent cut in Sound Science activities in the Science and Technology portion of the EPA budget. Recent studies supported by EPA grants are adding new understanding to the role outdoor and indoor air have on the initiation and progress of respiratory diseases. Now is clearly not the time to reduce EPA's commitment to research.

EPA AND STATE GRANTS

Much of the work in implementing, monitoring and enforcing the Clean Air Act is conducted at the state and regional level. While much of the key leadership is provided by EPA, a good share of the work is done by states. The President's budget proposes a 26.7 percent increase in Clean Air activities in the State and Tribal Assistance Grants portion of the EPA budget. The proposed increase is appreciated. However, given the work load remaining, meeting the existing new ozone and particulate standards, the preparation needed for new standards and ongoing work in other clean air activities like air toxics, other criteria pollutants attainment programs, and permits—additional support for state clear air activities is needed.

EPA: NIEHS SUPERFUND BASIC RESEARCH PROJECT

This program focuses on the health effects of toxic chemical exposure at Superfund hazardous waste sites, and devises methods for minimizing the relative health risks of exposure for clean up site employees. The ALA/ATS believes the EPA has made an excellent investment in the future of human protection and worker safety by supporting this research and training program. We recommend $45 million for transfer to the National Institute of Environmental Health Sciences (NIEHS) for toxicology research and an additional $23 million for Superfund worker training. The NIEHS Superfund research program is conducting exiting research to develop biomarkers for measuring the actual burden of environmental toxics in humans.

EPA OZONE AND PARTICULATE MATTER NAAQS ATTAINMENT

As the subcommittee is no doubt aware, EPA has recently revised the Clean Air Act's National Ambient Air Quality Standard (NAAQS) for ozone and particulate matter (PM). The ALA/ATS strongly support these new standards. While much work needs to be done to monitor and implement the new ozone and PM standards, there is still much unfinished business to attain the old standard. Many areas in the U.S. have yet to comply with existing standards. To attain air quality standard and to appropriately plan and implement the new standards will require significantly more resources than requested in the Administration's budget.

EPA AIR TOXICS

The Air Toxics Program has significant work before it that will require additional funding. The ALA/ATS is concerned that without additional resources, the Air Toxics Program will not be able to complete its current work agenda. We are especially concerned that if the establishment of the MACT rules is to proceed, new resources at EPA will be required.

EPA OTHER CRITERIA POLLUTANTS NAAQS PROGRAM

EPA needs to provide more technical assistance to states for developing control programs for all the other criteria pollutants. For example, there is a critical need in the SO_2 peak exposure control plans. While EPA is currently advocating that health threats posed by exposure to peak levels of SO2 be addressed at the state level, the EPA is not providing the states with the resources to accomplish this goal. The EPA needs to provide the state the resources to address this important clean air problem.

EPA ENVIRONMENTAL JUSTICE

All Americans are impacted by air pollution. However, poor and ethnic Americans face a disproportionate share of exposure to environmental health threats. This is especially true in air pollution. A 1990 EPA report states that "racial minorities and low-income populations experience higher than average exposures to selected air pollutants, hazardous waste, contaminated fish and agricultural pesticides in the workplace."

Industrial and electricity generating facilities, for example, are major sources of harmful air pollution. Studies have shown that theses facilities are disproportionately concentrated in counties where high percentage of minorities live. Of all U.S. counties considered urban, only 12 percent had minority populations greater than 31 percent. However, these areas contain 21 percent of the 3,000 major air polluting facilities in our nation.

We support EPA's effort to ensure the benefit of clean air and other environmental protections are shared by everyone. We encourage the subcommittee to support EPA's efforts.

HUD SUBSIDE OF TOBACCO SALES

The American Lung Association and the American Thoracic Society are pleased with recent Congressional efforts to end the U.S. taxpayer subsidy of cigarette sales through smoke shops. The recent Congressional report highlighting this issue was most helpful in ending this practice. Attached is copy of a statement of the American Lung Association regarding this issue.

VA RESEARCH PROGRAM

The VA Research Program has a significant impact on lung disease. The VA Research Program is an intramural research program for physicians and scientist who work in the VA's medical system. The VA Research Program provides research grants to VA physicians to study diseases and conditions that place a unique burden on the VA population.

The American Lung Association and the American Thoracic Society are extremely disappointed that the Administration has flat funded the program in fiscal year 2001 budget request.

Lung diseases take a heavy toll on veterans. Lung disease represents the leading medical reason for hospital admissions among veterans. Lung cancer, chronic obstructive pulmonary diseases, and pulmonary infection are major causes of illness for VA beneficiaries. Because of the disproportionate impact of lung disease had on veterans, the VA Research Program has historically been a strong supporter of pulmonary disease research. The ALA/ATS strongly support the VA Research Programs and encourage this subcommittee to provide $386 million for the program.

Our recommend of $386 million represents a $65 million over current funding. These funds are needed to accomplish the following goals:

—Maintain Current Services-the VA research program will require $11 million just to maintain current services.

—Expand Research Programs—the VA research program needs $43 million to expand the research program. In 1988 the VA Research program funded 2,432 grants. Today, in an era of vast scientific opportunity, the VA program funds only 2,072 grants—360 fewer than in 1988. An increase of $43 million is needed to help restore the VA Research program to prior level of activity and to capture the research potential that will have a direct impact on VA patient care.

—Research Career Training Programs—the VA has made a significant commitment to training clinician and non-clinician investigators. The VA has also initiated career development training programs for rehabilitation medicine and health systems research to insure a cadre of investigators trained in areas of direct relevance to veterans.

—Research Oversight—the ATS/ALA recommend Congress provide $1 million for research oversight. Recent cases of lapses in the clinical research oversight in trials supported with public funds—including VA and other Federal granting agency sponsored research-have lead to an aggressive VA quality oversight program. The VA will lead the nation in establishing an accreditation process for research programs to ensure a research integrity and protection of patients enrolled in clinical trials.

In addition to providing adequate funds for the VA Research Program, the ALA/ATS requests that the subcommittee urge the VA to continue implementation and testing of recently approved policy directing the administration of VERA research support funding to medical centers. VA funded investigators often are caught be-

tween the time pressure demands of research and providing patient care. In 1999 the VA approved a plan to provide VA researchers with adequate time to conduct research. We hope the subcommittee will encourage VA to continue implementation of VERA research support funding policy.

This subcommittee plays an important role in protecting the lung health of all Americans. With strong bipartisan support for clean air programs at EPA and the research program at the VA, this subcommittee can take major strides in protecting and improving the health of our nation.

PREPARED STATEMENT OF THE NATIONAL CONGRESS OF AMERICAN INDIANS

INTRODUCTION

Good morning Chairman Bond, Senator Milkulski and distinguished members of the Senate Appropriations Subcommittee on Veteran Affairs, HUD, and Related Agencies. My name is Susan Masten, I am President of the National Congress of American Indians (NCAI) and Chair of the Yurok Tribe of Northern California. On behalf of NCAI, I would like to thank you for the opportunity to present testimony regarding the President's fiscal year 2001 Budget Request for Indian programs and services.

NCAI is extremely encouraged by this year's budget request. For the first time in a generation, the President has proposed a significant increase in the budget for programs that assist Indian people and Indian tribes. If preserved through the appropriations process, an additional $1.2 billion over last year's level will be provided to Indian Country. The last time the federal government enacted an increase of a similar scope to the President's fiscal year 2001 budget proposal, was in the mid-1970's, as a part of President Nixon's Tribal Self-Determination policy. The President's fiscal year 2001 budget request represents a commitment to Indian programs and will better serve Indian communities. It also exemplifies a meaningful step toward honoring the federal government's treaty and trust obligations to Indian nations. As Congress begins the appropriations process for fiscal year 2001, NCAI seeks support from this Subcommittee to fully fund the Indian programs in the Departments of Housing and Urban Development (HUD) and Veterans Affairs.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

The Presidents's fiscal year 2001 budget request of $650 million for the Indian Housing Block Grant program reflects a $30 million increase over fiscal year 2000. This request falls short of the $985 million in base funding determined by the National American Indian Housing Council (NAIHC) as a minimum to begin addressing the housing shortage in American Indian communities. NCAI urges the Subcommittee to address the real housing need in Indian Country by appropriating $985 million in fiscal year 2001 for the Indian Housing Block Grant program. Adequate Indian housing funding is critical since 40 percent of Indian reservation housing currently is considered substandard; this is in stark contrast to the national substandard housing rate of 5.9 percent. This disparity translates to an inadequate housing ratio of over 6:1.

HUD has a variety of other initiatives which will benefit tribes greatly. The Indian Housing Block Grant program will allow tribes or tribally-designated housing entities to provide housing or housing assistance for qualified law enforcement officers. Indian families are also eligible for the 10,000 new rental housing vouchers to help low-income working families through the Administration's proposed $690 million initiative. Additionally, the budget proposes to set aside $5 million of the Community Development Block Grant program for competitive grants to tribal colleges to assist their communities with neighborhood revitalization, housing, and economic development. A proposed $2 million will allow HUD to establish a Native American Economic Development Access Center, which will link all 12 agencies through a toll-free number that Native American callers can use to receive information about federal programs for economic development. Additionally, the budget proposes a $5 million set aside within the Indian Housing Block Grant to create a nonprofit homeownership intermediary. This homeownership intermediary will serve as a catalyst for the creation of private homeownership in Indian Country and will support the "one-stop mortgage centers". Finally, HUD programs will also benefit tribal governments through the proposed expansion of the Empowerment Zone initiatives. NCAI strongly supports the funding of these much-needed programs and believes that they will help in addressing the housing shortage in Indian Country.

Recently, Senator Christopher Bond, Chairman of the HUD Appropriations Subcommittee, has threatened to block government funding of American Indian smoke

shops in an effort to curb teen smoking. NCAI is extremely alarmed by this threat and would request that this Subcommittee support the continuation of HUD funding for smoke shops under the Indian Community Development Block Grant program.

DEPARTMENT OF VETERANS AFFAIRS

Mr. Chairman, adequate funding for Veterans programs is another critical concern of Indian Country. Native American veterans have served the United States with honor and distinction since this nation was founded. As a result, Indian people have the highest percentage of veterans of any population within the United States. According to the Veterans Administration, over 160,000 American Indians have served in the Armed Forces. Native people also carry the proud distinction of being the most decorated group in this country's history. Today, Native veterans have many pressing needs such as housing, health care, benefits, and other concerns that include issues unique to Indian Country.

NCAI is very pleased by the Administration's continued support for the Native American Veterans Housing Loan Program. For fiscal year 2001, the Administration has provided a $12,000 increase, resulting in a total request of $532,000. While only a small program, the Native American Veterans Housing Loan Program is vital since it provides direct loans to veterans living on trust land. Many times these veterans are unable to secure such loans through local banks or credit unions. These loans are available to purchase, construct or improve homes. The principle amount of loans under this authority is generally limited to $80,000, except in areas where housing costs are significantly higher than costs nationwide. This pilot program began in 1993 and is authorized through December 31, 2001. Mr. Chairman, to date, this program has been very successful and critical in providing home ownership opportunities to our nation's Native veterans. NCAI calls on this Subcommittee to support the President's budget and consider the establishment of a permanent and expanded program in order to continually serve the important needs of Native veterans.

CONCLUSION

Mr. Chairman, we urge the Congress to fulfill its fiduciary duty to American Indians and Alaska Native people and to uphold the trust responsibility as well as preserve the Government-to-Government relationship. This responsibility should never be compromised or diminished because of any Congressional agenda or party platform. Tribes throughout the nation relinquished their lands, as well as their rights to liberty and property in exchange for this trust responsibility. The President's fiscal year 2001 budget request acknowledges the fiduciary duty owed to tribes. We ask that the Congress maintain the federal trust responsibility to Indian Country and continue to aid tribes on our journey toward self-sufficiency. This concludes my statement. Thank you for allowing me to present for the record the National Congress of American Indians' comments regarding the President's fiscal year 2001 proposed budget for Veteran Affairs, HUD, and Related Agencies.

PREPARED STATEMENT OF THE NUCLEAR ENERGY INSTITUTE [NEI]

EPA DUAL REGULATION OF NRC LICENSED SITES—FEMA RADIOLOGICAL EMERGENCY PREPAREDNESS PROGRAM

Mr. Chairman and members of the subcommittee, my name is Joe Colvin. I am President and Chief Executive Officer of the Nuclear Energy Institute. The Institute coordinates public policy for the U.S. nuclear industry. We represent 275 member companies with a broad spectrum of interests, including every U.S. utility that operates a nuclear power plant, their suppliers, fuel fabrication facilities, architectural and engineering firms, labor unions and law firms, radiopharmaceutical companies, research laboratories, universities and international nuclear organizations.

Today I would like to discuss two matters of great importance to America's nuclear industry: (1) the continuing situation of EPA dual regulation of Nuclear Regulatory Commission (NRC) licensees, and (2) reforming the Federal Emergency Management Agency (FEMA) Radiological Emergency Preparedness Program.

Allow me to begin by expressing our industry's appreciation for your commitment to careful oversight of the Environmental Protection Agency (EPA), and, in particular, to the agency's administration of the National Priorities List. The nuclear industry is very appreciative of this subcommittee's recognition of the need for continued congressional oversight of federal regulatory funds. We join you in embracing the tenets of the White House regulatory reform effort that discourages the alloca-

tion of funding to agencies whose regulation has proven inconsistent or incompatible.

In 1998, the House Appropriations Committee adopted language in its report that specifically prohibited the EPA from spending funds to place Nuclear Regulatory Commission (NRC) licensees undergoing decommissioning and license termination on the EPA's National Priorities List, better known as the "Superfund List." However, the EPA simply continues to disregard that clear congressional directive to stop intruding in NRC activities. They do so, in spite of the subcommittee's expression of complete satisfaction with the high level of protection afforded to public health and safety by the NRC's site remediation regulations. Unfortunately, the EPA continues to waste public funds to challenge the NRC's authority to regulate its own licensees in the establishment of radiation protection limits at decommissioned nuclear sites.

The EPA's duplicative regulatory role regarding the radiological aspects of nuclear site decommissioning diverts industry time and resources away from the NRC's clear, consistent site cleanup standards which focus on protecting public health and safety. The EPA's refusal to accept the NRC's decommissioning standards for remediated sites makes industry compliance quite confusing and far more expensive without a significant increase in public health and safety. NRC regulations require plant licensees to collectively accrue $45 billion in funds to decommission nuclear plant sites. It would be financially imprudent for these licensees to spend accrued funds to pursue cleanup under a threat of being revisited by another federal agency on the same issues.

One thing is clear. If the EPA continues to intervene in the remediation of NRC-licensed sites, the agency's activities could inhibit the effective implementation of the time-tested NRC site remediation program and ultimately could hinder the safe, efficient cleanup of nuclear sites. We urge you to do all that you can to prevent dual regulation of the nuclear facilities.

BACKGROUND

The Atomic Energy Act of 1954 gives the NRC responsibility to regulate the civilian uses of nuclear materials. Under this authority, the commission has successfully remediated more than 70 nuclear sites to a level that fully protects public health and safety. By comparison, CERCLA assigns the EPA primary responsibility to administer the remediation of contaminated sites included on the Superfund list. For years, this potentially confusing legislative language was inconsequential because EPA's policy was to defer to the NRC regarding NRC licensed facilities. Only under the direction of EPA Administrator Carol Browner has the less than clear delineation of responsibility resulted in the EPA pursuing duplicative and inconsistent regulatory policies regarding NRC licensees. Nuclear power plants are not alone in this duplicative regulatory environment. They are joined by medical facilities, universities with nuclear research programs, and radiopharmaceutical companies.

In 1992, the EPA agreed to defer remediation of NRC-licensed sites to the nuclear regulator. That interagency accord was consistent with NRC's mission under the Atomic Energy Act of 1954, to act as the exclusive regulator and standard-setter of certain radioactive materials. Based on the interagency agreement, the NRC alone established policy and guidelines to successfully regulate the site remediation and license termination for the more than 70 sites previously mentioned, on a case-by-case basis.

In 1997, the NRC formalized its approach by issuing a final rule that included a generic environmental impact statement. In addition to providing a clear regulatory approach, the final rule articulated specific radiation safety standards for remediation and license termination. The NRC stated that "the final rule will result in more efficient and consistent licensing actions related to the numerous and complex site decommissioning activities anticipated in the future."

The NRC adopted this rule after four years of extensive scientific study and public comment, during which NRC held more than a dozen major workshops and meetings on residual radiation standards and provided three separate requests for public comments. This broad level of public-participation produced more than 7,000 comments from a wide range of interests—including scientific and professional organizations—EPA and other federal agencies, state and local governments; Native Americans, NRC licensees, academic bodies, and civic and environmental organizations. The EPA actively participated in this process and was consulted by the NRC throughout its rulemaking.

NRC's four-year rulemaking process, and related scientific studies, led the agency to conclude that public health and safety is best protected by a regulation that sets a maximum limit on potential exposure to members of the public. The exposure

limit from residual radiation at remediated sites is for all possible "dose pathways," such as air, soil, surface and ground water, and food products grown at the remediated site. The regulation also requires that a site-specific, cost-benefit analysis be performed by the licensee to identify actions to be taken to further remediate the site and reduce potential levels of exposure below the maximum limit.

The approach taken by NRC including a maximum radiation dose limit and a requirement to further reduce potential exposure to levels that are "as low as reasonably achievable (ALARA)," incorporates the recommendations of respected national and international scientific organizations[1] and is consistent with regulatory standards adopted in other countries. However, this approach differs from that taken previously by the EPA. The EPA approach includes a maximum radiation dose limit, but does not include a requirement to further reduce exposure levels. EPA also supports a separate groundwater requirement that utilizes the maximum contaminant levels (MCLs) established by EPA under the Safe Drinking Water Act (SDWA).

Based primarily on the lack of a separate radiation standard for groundwater in the NRC rule, EPA Administrator Carol Browner in 1997 informed NRC Chairman Shirley Jackson that EPA "would be forced to reconsider its policy of exempting NRC sites" unless EPA's approach was incorporated into NRC's final rule.[2]

Shortly before that correspondence, EPA pursued its rule for site cleanup standards that would have been generally applicable to all federal agencies, including the NRC. However, the EPA rule was rejected during an interagency review process, involving primarily EPA, NRC and the Energy Department, facilitated by the Office of Management and Budget. The EPA formally withdrew its proposed rulemaking in December 1996.

After substantial interaction with EPA—and despite continuing disagreement between the agencies on the regulatory approach to site remediation—the NRC issued its final rule in July 1997. NRC's rule has been applied to license termination decisions for its licensees.

For over two years, the EPA has continued to challenge NRC's regulatory program. In August 1997, the EPA issued a guidance memorandum to its regional offices that rejects the general acceptance of NRC's criteria under CERCLA, although the memorandum notes: "We expect that NRC's implementation of the [NRC] rule for license termination will result in cleanups within the Superfund risk range at the vast majority of NRC sites."[3] EPA also has interacted with public interest groups and the media on the decommissioning of NRC-licensed facilities, expressing concerns about the NRC standard and regulatory approach. Most recently, the EPA has formally criticized NRC's regulatory process as part of a NRC licensing review and has requested technical information from a NRC licensee regarding its site remediation plans.

Through its duplicative actions, the EPA is diverting attention away from the NRC's clear, consistent site cleanup standards to protect public health and safety. Rather, the focus has shifted to EPA's refusal to accept the NRC's decommissioning standards for remediated sites. In the case of nuclear power plants, NRC regulations require plant licensees to collectively accrue $45 billion in funds to decommission these sites. It would be financially imprudent for these licensees to spend accrued funds to pursue cleanup under a threat of being revisited by another federal agency on the same issues.

Such EPA interactions have taken place despite congressional direction that the NRC site remediation rule fully protects public health and safety: "It has come to the [House Appropriations] Committee's attention that the [EPA] has recently proposed the reversal of its long-standing policy of deferring to the—NRC for cleanup of NRC-licensed sites. In the past, EPA has not placed sites that have been successfully remediated under the NRC on the National Priority List. The Committee is satisfied that the NRC has and will continue to remediate sites to a level that fully protects public health and safety, and believes that reversing this policy is unwarranted and not a good use of public or private funds. EPA is therefore directed to

[1] Such organizations include the National Council on Radiation Protection and Measurements, the International Commission on Radiological Protection, and the International Atomic Energy Agency.

[2] Letter from EPA Administrator Carol M. Browner to NRC Chairman Shirley Ann Jackson, Feb. 7, 1997.

[3] Establishment of Cleanup Levels for CERCLA Sites with Radioactive Contamination, Aug. 22, 1997, OSWER No. 9200.4–18.

continue its long-standing policy on this matter with the NRC and spend no funds to place NRC-remediated sites on the NPL."[4]

EPA'S INTERACTION IN REMEDIATION OF NRC-LICENSED SITES IS DUPLICATIVE, INCONSISTENT

EPA's continuing interactions in NRC's regulatory process reflect an inconsistent and duplicative regulatory approach and demonstrate a threat to list remediated sites on the National Priorities List even after an NRC has terminated a license and relinquished jurisdiction.

To that end, EPA's intervention has raised serious stakeholder concerns regarding the authority and finality of NRC licensing decisions; the potential of parties associated with affected sites for future liability; and the looming uncertainty regarding a site remediation's ultimate duration and costs. More importantly, EPA's involvement erodes stakeholder confidence in the integrity of federal regulatory review and oversight, which runs counter to the objectives of the administration for "reforming and making more efficient the regulatory process."

The EPA's resources should be devoted to high-priority cleanup activities under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). Yet, the agency continues to dilute its resources by extending CERCLA authority to nuclear sites already regulated effectively by the NRC. This defies the dictates of both common sense and sound public management.

Last year, the House Committee amplified its displeasure with EPA by pointing out that "any reversal of the long-standing policy of the EPA to defer to the NRC for cleanup of NRC-licensed sites is not in the public interest and is not a good use of public or private funds."[5] The committee recognized that attempts at dual regulation by the EPA have created legitimate stakeholder concerns regarding the authority and finality of NRC licensing decisions, the duration and cost of site cleanup, and the potential future liability of parties associated with affected sites.

To resolve this ongoing problem, the committee encouraged the EPA and NRC to enter into a memorandum of understanding (MOU), which clarifies the circumstances for EPA's involvement at NRC sites when requested by the Commission. The agencies were directed to report back to the committee by May 1, 2000, on the MOU status.

Mr. Chairman, I regret to report to you today that the EPA is still involved in the decommissioning and cleanup of NRC-licensed sites, contrary to the guidance that the Congress has provided over the past three years. There has not been any substantive progress in developing this MOU, as requested by the House Committee more than six months ago.

Since the House Committee's advice that the EPA should defer to the NRC for cleanup of NRC-licensed sites, there have been a number of examples of ongoing involvement by the EPA at these facilities. Recently, the EPA has intervened in public meetings on decommissioning held at nuclear power stations, in meetings between reactor licensees and their state regulators and directly with the state legislature in one instance. They have also continued their direct involvement with NRC reactor licensees through meetings and requests for technical information of a radiological nature.

Earlier this year, the EPA issued a guidance memorandum to regional Superfund managers clarifying EPA's role under CERCLA at NRC-licensed facilities.[6] In our view, the memorandum is simply a blueprint for continued dual regulation by the EPA.

As characterized by the EPA, the memorandum is intended to accomplish several goals:

—provide assurances to the public that NRC licenses are decommissioned in a manner that is protective of human health and the environment,

—describe EPA's national policy, and

—provide guidance to the EPA staff, and to the public and the regulated community.

Since a joint MOU has not been concluded between the agency and NRC, EPA said the memorandum should be used by the EPA regions as guidance for actions regarding the decommissioning of NRC-licensed sites. It appears that the EPA is blatantly and intentionally disregarding this Congress' repeated instructions.

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[4] House Rpt. 105–610: Departments of Veterans Affairs and Housing and Urban Development and Independent Agencies Appropriations Bill for 1999 (accompanies H.R. 4194 Public Law 105–276)

[5] U.S. House of Representatives, Report 106–286 to accompany H.R. 2684.

[6] OSWER No. 9272.0–15P, "Interim Final Guidance on Evaluation of Facilities Currently or Previously Licensed by NRC under CERCLA," dated February 17, 2000.

The guidance sets out a roadmap for EPA staff to conduct "protectiveness evaluations of NRC decommissionings" and "evaluate the need for CERCLA response actions at NRC-licensed sites." EPA would undertake such actions when requested by any stakeholder, where "the decision as to whether such an evaluation is appropriate will generally be determined by the EPA region in which the facility is located."

The guidance includes step-by-step procedures for possible actions to be taken by EPA with regard to an NRC-licensed site. How EPA should conduct an analysis of NRC's proposed cleanup levels; how EPA should suggest practices that NRC licensees should follow; and how EPA should consider listing sites on the NPL after the completion of NRC decommissioning and termination of the license are examples of proposed actions.

What is not in the EPA guidance memorandum is acknowledgement that NRC is the lead agency for its licensees, constraint on EPA involvement at NRC sites when not requested by NRC, or any reference to EPA consulting or coordinating with the NRC. With such glaring omissions, this document, now serving as EPA policy on the agency's role regarding NRC-licensed sites, stands in direct conflict with the guidance provided by this House Appropriations Committee to the EPA.

The EPA and NRC have only recently attempted to resurrect a dialogue on a MOU to help resolve the issue of dual regulation. On February 17, the EPA sent NRC a letter to "address the Committee's direction that our two agencies work together on an MOU." The letter conveys a copy of the recently issued guidance memorandum, which reflects the same regulatory approaches proposed by EPA in a draft MOU rejected by the NRC in 1998. In parallel, the NRC sent a letter to EPA on February 23 that reportedly conveyed a proposed draft MOU similar to that rejected by EPA in 1997.

Mr. Chairman, more than two years after the first round of unsuccessful interaction, and six months after instruction from the House Appropriations Committee to proceed with reaching an MOU, there has been little progress by the two agencies toward resolving this issue.

Based on the record outlined in this testimony, we are skeptical that an MOU, even if concluded in the future between the EPA and NRC, will provide a lasting resolution to the issue of dual regulation. We note that the agencies entered into a similar MOU in 1992[7], and the EPA has previously deferred to NRC as a matter of policy under CERCLA. But in fact, it is the breach of such agreements between the two agencies that forms the backdrop to the situation that exists today—inefficient and duplicative regulation.

In our view, an MOU cannot address the root cause of the issue. Provisions in CERCLA set the stage for conflicting and overlapping authority between the NRC and EPA, which inhibits the remediation of NRC-licensed sites in a safe, timely and economical manner. The industry believes that the ultimate resolution of this issue requires legislative action. However, we recognize that this committee is involved in the appropriation and oversight of expenditures of public funds, not in the authorization of statutory responsibilities of federal agencies. In that light, we respectfully offer several suggestions for consideration by the committee that may avoid costly duplication in site cleanup until such time as a legislative solution can be affected:

—The committee should reconsider its previous report language regarding an MOU and provide more definitive direction and guidance as to what the MOU should address and when the MOU should be concluded.

—The committee should consider initiating an independent investigation of EPA actions and expenditures of resources with regard to the previous direction of the committee.

—The committee should continue the prohibition on EPA for using appropriated funds for dual regulation of NRC-licensed facilities.

REFORMING THE FEMA RADIOLOGICAL EMERGENCY PREPAREDNESS PROGRAM

I would now like to address a separate topic affecting the nuclear energy industry that also falls under the jurisdiction of this subcommittee—the FEMA Radiological Emergency Preparedness (REP) Program.

There have been developments over the past several years affecting the REP program that should provide opportunities for enhancing program efficiencies and mak-

[7] Memorandum of Understanding between Ivan Selin, Chairman, USNRC, and William K. Reilly, Administrator, USEPA, on Guiding Principles for EPA/NRC Cooperation and Decision-making, dated March 16, 1992.

ing fiscal improvements. However, associated reductions in program budgets and expenditures have not occurred.

Since 1998, Congress has authorized FEMA to asses and collect user fees directly from NRC licensees to fully fund the REP program, based on the costs incurred or obligated for both site-specific and generic services performed by FEMA staff or contractors. In 1996, FEMA initiated a strategic review of the REP program that was expected to optimize use of federal resources and enhance response capabilities of state and local jurisdictions. During this same period, the number of nuclear power plant sites that are covered by the REP program has decreased from 69 to 63 sites due to the shutdown and decommissioning of six sites. More recently, FEMA has undertaken the transition from use of National Laboratories resources to obtaining services from an outside source for evaluating emergency exercises at nuclear power plant sites.

These developments should reduce the need for funding and other resources to implement the REP program in an effective, efficient manner. Yet the budgets for fiscal year 1999 through 2001 have increased from $12.9 million to $14.9 million, an annual increase of 6 percent per year. The number of FEMA staff assigned to the REP program has remained essentially unchanged during this period, at about 90 full-time equivalent (FTE) staff. Since the number of nuclear power plant sites was reduced by 9 percent, one could reasonably expect a similar drop in the number of personnel needed to perform the job. This did not occur.

Mr. Chairman, we suggest that this year would be an appropriate time for the committee to make inquiries of FEMA regarding the reduction in the number of sites requiring agency activities and the REP program budget and staffing trends. We also suggest, in light of the transition to direct assessment and collection of user fees granted to FEMA by Congress, that the committee seek assurances that the fees are being properly and exclusively applied to the REP program budget.

Thank you Mr. Chairman for the opportunity to express NEI's positions with regard to these important issues.

PREPARED STATEMENT OF THE SOCIETY FOR NEUROSCIENCE

Mr. Chairman my name is Dennis Choi. I am the President of the Society for Neuroscience and the Jones Professor and Head of Neurology at Washington University in St. Louis, as well as Neurologist-in-Chief at Barnes-Jewish Hospital. I am testifying on behalf of the Society for Neuroscience, the largest scientific organization in the world dedicated to the study of the brain and nervous system. Neuroscience forms the fundamental basis of the medical specialties of psychiatry, neurology, neurosurgery, and an important portion of many other medical specialties including anesthesia, endocrinology, geriatrics, internal medicine, ophthalmology, otolaryngology, pediatrics, and rehabilitation medicine. The Society for Neuroscience numbers among its members more than 28,000 basic and clinical researchers affiliated with universities, hospitals and scientific institutions throughout North America and in other countries. A large majority of Society members are United States citizens.

Mr. Chairman, the Society is grateful for this opportunity to give testimony, and I would like to express our gratitude to this Subcommittee for the priority that has been placed on funding biomedical research at the National Science Foundation (NSF) and the Veterans Administration (VA).

The Society for Neuroscience requests increased research funding for the National Science Foundation and for the Department of Veterans Affairs to facilitate the progress of research already being conducted at these institutions, and to aid in the funding of future projects and grants.

NATIONAL SCIENCE FOUNDATION

The NSF is celebrating its 50th anniversary this year. It has made great contributions to scientific knowledge, benefiting mankind in numerous ways. Over 100 Nobel prizes have been awarded to researchers who have been supported by NSF grants. The President's fiscal year 2001 budget for the National Science Foundation requests $4.57 billion, a 17.3 percent increase over fiscal year 2000. For Research and Related Activities, the President's budget requests $3.54 billion, a 19.7 percent increase. This is the largest budget request in NSF's history, demonstrating the high priority the President and his scientific advisors have placed on research at the NSF. The Society for Neuroscience strongly supports the President's request.

Basic neuroscience research is key to understanding neurological and mental disorders, and helping the millions of Americans with these disorders today. Moreover, understanding the brain is itself an essential scientific mission. We seek knowledge

in many areas, but the most fundamental of quests is the quest to understand our nature as human beings. I believe that understanding of our physical universe depends on assumptions about ourselves, and that to accomplish the former, we must gain knowledge about how our brains perceive, calculate, ponder, feel, and remember. Observations are most meaningful when the observer is defined. The NSF funds hundreds of studies in the area of basic neuroscience, and these studies have contributed much to what we know today about the brain.

Some of the most exciting and challenging scientific research opportunities extant today address the mapping of function onto the structure of the brain. NSF plays the pivotal role in the development and support of this multidisciplinary research area through activities that provide unique opportunities for neuroscientists to collaborate with investigators in mathematical, computer and information sciences and engineering. Teaming modern brain scientists employing molecular biology, neurogenetic, neurophysiological, psychological and computational techniques with investigators in these other scientific disciplines provides a broad and powerful scientific infrastructure. The potential for such an infrastructure to catalyze insights and discoveries is huge. One can count on the identification of solutions to problems in neuroscience research; furthermore, experience has demonstrated repeatedly the ability of "blue sky" research to achieve breakthroughs, often in unexpected areas, that lead to practical benefits for mankind.

A few examples of the important neuroscience research supported by NSF:

—NSF-sponsored research programs have led the way in developmental neurobiology, a field dedicated to how the brain evolves, develops and changes.

—NSF-sponsored research programs have played a pivotal role in the development of cognitive neuroscience, which combines the study of behavior, cognition and artificial intelligence systems with basic neurobiological studies.

—NSF-sponsored research studies the physiological and psychological processes involved in the production and perception of speech and on the biological basis of language in the central nervous system.

Advances in science and engineering have opened new frontiers for discovery and innovation in many areas, and this most emphatically includes neurosciences. We can now visualize microstructures within living neurons, tap the power of genetic information to identify the molecules used signaling, and begin to observe the functional "circuitry" of the human brain.

Nanotechnology.—The President requested $497 million in fiscal year 2001 for the National Nanotechnology Initiative (NNI). The National Science Foundation, as the lead agency for this Initiative, would receive a $217 million increase for the NNI this year. This is an area of far-sighted research with tremendous promise. The Society for Neuroscience supports this request.

Social, Behavioral and Economic Sciences (SBE).—The President is requesting $175.14 million for SBE, a 19.8 percent increase over last year. The Society for Neuroscience believes that this is money well spent, and that this Directorate will ultimately bring benefits to millions of citizens in our country by enhancing our understanding of vital social systems and organizations, and promoting research in the areas of human cognition, language, and social behavior.

DEPARTMENT OF VETERANS AFFAIRS

In contrast to the Administration's NSF budget request, its recommendation for VA Medical and Prosthetic Research is inadequate. We ask that this Subcommittee do more, and continue the recent trend of rebuilding important VA medical research programs.

The Society for Neuroscience strongly supports the recommendations of the Friends of the VA Medical Care and Health Research (FOVA) coalition and the Independent Budget for the Veteran's Administration, organizations supported by more than 50 groups dedicated to research funding at VA. Both organizations have recommended an increase of $65 million for the VA's Medical and Prosthetic Research Program.

One of the greatest aspects of VA-sponsored research is that it not only aids our nation's veterans, it also integrates clinical and basic research, and promotes the rapid transfer of new knowledge from bench to bedside. A few examples of the important research conducted at the VA:

—VA scientists in Seattle identified a gene mutation that causes a form of dementia in middle-aged people. The mutated gene, which produces tangles of protein filaments identical to those found in the brains of patients with Alzheimer's disease, may offer a new target for Alzheimer's disease treatments. Four million older Americans suffer from Alzheimer's disease at a cost of $100 billion each

year. Alzheimer's disease is the fourth leading cause of death among adults, taking more than 100,000 lives each year.

—Using wire implants and electrical impulses—functional electrical stimulation (FES)—to replace non-functioning nerves, VA researchers in Cleveland have developed methods to permit people with spinal cord injuries to regain some useful control of a paralyzed hand.

—A major VA study established that the medication clozapine is more effective and has fewer side effects than the standard drug haloperidol for treating schizophrenia in patients who don't respond to customary first-line therapy. In another study, VA investigators in Denver discovered a gene that appears to increase risk for schizophrenia, a finding that may eventually provide a new target for drug or genetic therapies. Three million Americans suffer from schizophrenia, the most chronic and disabling of mental illnesses. The cost for treatment is over $30 billion annually.

—Researchers at the Buffalo VA Medical Center identified a brain region responsible for tinnitus, the ringing in the ears suffered by millions of Americans. Their discovery may point the way to needed treatments.

Every day, these programs are developing new methods to understand, diagnose and treat devastating disorders.

Last year, the Department of Veterans Affairs announced a new study on spinal cord injury care, comparing VA spinal cord injury care with that provided in the private sector. Over 250,000 people are spinal cord injured, with 11,000 new cases reported each year. The health care costs from this injury exceed $10 billion annually. This study's results will allow the VA to determine the best modes of care for paralyzed veterans.

The VA medical system provides veterans with access to highly skilled medical care through various affiliation arrangements, and provides researchers with an opportunity to conduct large, pivotal clinical trials benefiting all Americans. However, inadequate funding has inhibited the VA's ability to recruit high-quality researchers as it has done in the past. As a result, the VA has had to reduce its staff, consolidate hospitals and clinics, and lower a number of existing services at medical centers. This is tragic for the millions of veterans in our nation, as America's veterans lose access to needed medical care, and valuable research opportunities are lost.

SUMMARY

In summary, the Society for Neuroscience asks that this subcommittee support the Administration's request of 17.3 percent increase in NSF's overall budget and a 19.7 percent increase in the Research and Related Activities account. The Society for Neuroscience recommends $386 million for the VA Medical and Prosthetic Research program in fiscal year 2001, an increase of $65 million over fiscal year 2000. We strongly believe that the research programs we advocate are a worthy investment in our country's future, and we urge you to place NSF and VA research among the Subcommittee's highest priorities.

Thank you for the consideration of our request.

PREPARED STATEMENT OF NORMAN E. D'AMOURS, CHAIRMAN, NATIONAL CREDIT UNION ADMINISTRATION

I am pleased to submit the National Credit Union Administration's request for the NCUA Central Liquidity Facility (CLF) and Community Development Credit Union Revolving Loan Fund (CDRLF).

The CLF, established in 1979, serves as a liquidity source for credit unions. The CLF borrowing authority is not used to build up credit union loan volumes because the Federal Credit Union Act prohibits using proceeds from CLF loans to expand credit union portfolios. Rather, the funds are advanced strictly to support the purposes stated in the Federal Credit Union Act—liquidity needs of credit unions. The CLF sustains confidence in the credit union system, as credit unions know that during periods of temporary liquidity shortages, back-up funds are available to meet abnormal deposit outflow.

The CLF is owned by its member credit unions, which contribute all of the CLF's capital by the purchase of stock. When a CLF member has a liquidity need due to abnormal cash outflows, it may seek a loan from the CLF. The CLF can finance a limited amount of lending activity from its assets, but it also has the authority to borrow to meet liquidity demands. Currently, the CLF utilizes the Federal Financing Bank as its exclusive source for borrowing funds.

Until fiscal year 2000, the limit on CLF borrowing for new loans to credit unions included in the appropriations bills was $600 million; the fiscal year 2001 budget

submitted by the Office of Management and Budget seeks to reimpose a $600 million limit on borrowing. OMB also requests a $296,303 limit on administrative expenditures for fiscal year 2001. We believe that the cap on the CLF's borrowing authority should be omitted from the Appropriations bill, as it was for fiscal year 2000 in the supplemental appropriations law, Public Law 106–31. Keeping the borrowing limit at the fiscal year 2000 level has no budgetary or scoring impact.

A borrowing cap imposed in the appropriations process is unnecessary because CLF borrowing is limited by the Federal Credit Union Act. Under the Act, the CLF's borrowing is limited to 12 times its subscribed stock and surplus, currently about $21 billion. When Congress first imposed the $600 million limit in 1980, $600 million exceeded 12 times the subscribed stock and surplus of the CLF by more than $200 million. Despite the dramatic growth in credit unions and increase in the CLF's subscribed stock since 1980, the appropriations limit was never adjusted until your legislation last year. While the $600 million appropriations limit has, in the past, been adequate to address isolated liquidity needs in credit unions, this amount represents less than 2.9 percent of the amount that the CLF would be permitted to borrow under its enabling legislation.

In anticipation of potential liquidity demands due to the Year 2000 date change, Congress removed the cap on CLF borrowing in last year's supplemental Appropriations measure. The CLF was an active liquidity lender during the last months of 1999 as members with existing liquidity deficits prepared to meet additional potential withdrawals forecast in response to the Y2K event. During the latter part of 1999, the CLF, through its agent members, made a total of 157 short-term loans to 39 member, natural person credit unions. The majority of these loans were overnight. The aggregate amount of these loans, including renewals, was $666.2 million. As of March 2nd of this year, all loans were repaid and no loans are presently outstanding.

Although we are all pleased that Y2K-related withdrawals did not materialize in the exaggerated amounts we prepared for, we should not conclude from this experience that a higher borrowing cap is unnecessary. The fact that the timing of the Y2K event was widely anticipated and generally foreseeable makes it a poor example for gauging the likely magnitude of an actual liquidity emergency. Typically, liquidity emergencies occur with little or no warning and may result from any variety of adverse economic or financial events. The severity and duration of such a liquidity emergency are also impossible to forecast.

Rather, we have concluded from the Y2K experience that the CLF's unhindered capacity to borrow and lend is importantly tied to the public's perception of the health of credit unions. The confidence generated by an adequate liquidity resource strengthens the stability of the system and may actually obviate or mitigate the need for a costly liquidity build up on the part of credit unions. The knowledge that the CLF was available as a back-stop, and that funds for liquidity would be forthcoming, was also an important factor in lessening actual liquidity demand at year's end. Credit unions knew that, if needed, the CLF could borrow adequate funds to meet liquidity demand, and they communicated this confidence to members. This, in turn, reduced members' perceived needs for accumulating additional cash. Thus, the CLF has an important psychological effect, even without lending activity.

The imposition of an inadequate borrowing cap on the CLF, however, could prevent it from fulfilling its statutory mission to promote credit union stability by providing liquidity and could potentially destabilize member confidence during an abrupt, unanticipated emergency situation. The $600 million borrowing cap severely restricts the CLF and would most likely prevent it from functioning as intended in the event of even a moderate liquidity strain. A limit of $600 million will not go very far to support a $400 billion credit union industry in any unusual deposit outflow. In the event of an unusual liquidity drain, the proposed cap could render the CLF unable to perform the function for which Congress created it.

Mr. Chairman, we respectfully request that you support our request and keep the borrowing cap at the fiscal year 2000 level in order to continue the NCUA's and CLF's ability to timely and effectively respond to any adverse liquidity situations.

NCUA supports the Administration's request regarding our fiscal year 2001 operating expenses. Our fiscal year 1999 operating expenses for the CLF were $136,000—significantly below our budget limitation of $176,000. Fiscal year 2000 and 2001 operating expenses will be higher—$257,000 in 2000 and $296,303 in 2001—because of the addition of a staff member. These administrative expenses do not come from appropriated funds, but are paid from the CLF's income.

Turning to another subject, I would like to thank this Subcommittee for its efforts in providing an additional $1 million for the Community Development Revolving Loan Fund in fiscal year 2000. As you know, the Fund makes loans to low-income credit unions. Since 1987, when the NCUA began administering the Fund, we have

revolved our $11 million appropriation ($6 million initially, $1 million added in fiscal years 1997, 1998 and 2000, and $2 million added in fiscal year 1999) into 151 loans totaling $21.0 million. In 1999 alone, we approved nine loans to nine credit unions for a total of $1.9 million. As of February 29, 2000, our pending applications total $2.7 million. We greatly appreciate the Subcommittee's support of our efforts to provide assistance to low-income credit unions.

Another important function of the CDRLF is in providing technical assistance to low-income credit unions. The President's budget for fiscal year 2001 includes a request for an additional $1 million to be used for technical assistance, and NCUA strongly supports this request. Under the Federal Credit Union Act, earnings on the Fund are used to provide technical assistance grants to low-income credit unions. However, because CDRLF loans are low interest—the current interest rate is two percent—the earnings generated are insufficient to meet all the technical assistance requests. For example, in 1999, while we granted $380,002 in technical assistance to 132 credit unions, we denied $107,795 of such requests—not because the applications lacked merit, but because we lacked the funds. The denied requests are probably only the tip of the iceberg. We hear reports from the field that many low-income credit unions do not apply for needed technical assistance because they assume that funds will not be available. The NCUA Board constantly struggles with the tension between the need to keep loan interest rates low and the need to generate interest income in order to be able to provide additional technical assistance. The additional funds for technical assistance proposed in the Administration's budget will greatly assist our efforts to provide technical assistance to low-income credit unions.

Finally, I would like to note that the credit union system continues to be in robust health. Credit unions had another banner year in 1999—assets and capital are at record levels, while the number of problem credit unions remains low. During 1999, total assets of federally-insured credit unions increased by 5.8 percent, from $388.7 billion to $411.4 billion. Despite the increase in assets, credit unions' overall capital to asset ratio increased to 11.6 percent, on average. Problem credit unions (those rated code 4 or 5) represent less than 1 percent of total shares. These figures demonstrate the continued overall safety and soundness of the credit union system.

The credit union insurance fund also remains strong. For the fifth consecutive year, and the sixth time in its history, the National Credit Union Share Insurance Fund returned a dividend to credit unions on their deposits in the fund. The dividend this year totaled $88.3 million, or 2.875 percent. In October, before the dividend payout, the equity level of the Share Insurance fund reached 1.32 percent. Even after the dividend, the Insurance Fund returned to 1.30 percent of insured deposits by December 31, 1999.

In summary, the credit union industry remains in excellent condition, with a strong insurance fund. While demand still outstrips supply, low-income credit unions are receiving more assistance than ever before, thanks to this Subcommittee's efforts and efforts made by NCUA over the past seven years. We respectfully request that this Subcommittee follow the Administration's recommendation to provide additional funds for technical assistance. As for the CLF, we respectfully request that the Subcommittee approve the OMB's request for a $296,303 limit on the CLF's administrative expenses and keep the CLF borrowing limit at the fiscal year 2000 level. This will assure that the CLF will be well-positioned to meet any unusual liquidity needs and may indeed minimize the risk such a liquidity need will occur.

Thank you for considering these requests.

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