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REAUTHORIZATION OF THE FEDERAL RAIL SAFETY PROGRAM

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HEARINGS

BEFORE THE

SUBCOMMITTEE ON

RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS

OF THE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

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CONTENTS

Proceedings of:
January 30, 2007 1
January 31, 2007 152

JANUARY 30, 2007

Summary of Subject Matter 41

TESTIMONY

Page
Boardman, Hon. Joseph H., Administrator, Federal Railroad Administration .. 9
Gonzalez, Hon. Charles A., a Representative in Congress from Texas 6
Scovel, Hon. Calvin L., III, Inspector General, U.S. Department of Transportation 9
Siggerud, Katherine, Director of Physical Infrastructure Issues, U.S. Government Accountability Office 9
Sumwalt, Hon. Robert L., III, Vice Chairman, National Transportation Safety Board, accompanied by Bob Chipkevich, Director, Office of Railroad, Pipelines and Hazardous Materials Investigations, National Transportation Safety Board 9

PREPARED STATEMENTS SUBMITTED BY MEMBERS OF CONGRESS

Brown, Hon. Corrine, of Florida 65
Costello, Hon. Jerry F., of Illinois 71
Cummings, Hon. Elijah E., of Maryland 73
Gonzalez, Hon. Charles A., of Texas 78
Mica, Hon. John L., of Florida 85
Oberstar, Hon. James L., of Minnesota 90
Walz, Hon. Tim, of Minnesota 146

PREPARED STATEMENTS SUBMITTED BY WITNESSES

Boardman, Hon. Joseph H 49
Scovel, Hon. Calvin L., III 94
Siggerud, Katherine 119
Sumwalt, Hon. Robert L., III 141

SUBMISSIONS FOR THE RECORD

Boardman, Hon. Joseph H., Administrator, Federal Railroad Administration:
Response to a question from Rep. Shuster 21
Response to a question from Rep. Braley 25
Response to a question from Rep. Napolitano 32
Scovel, Hon. Calvin L., III, Inspector General, U.S. Department of Transportation, responses to questions from Rep. Brown 111
Siggerud, Katherine, Director of Physical Infrastructure Issues, U.S. Government Accountability Office, responses to questions from Rep. Brown 136

ADDITION TO THE RECORD

Larson, Steve, Executive Director, California Public Utilities Commission. statement 147

Page

JANUARY 31, 2007

TESTIMONY

Page

Hamberger, Edward R., President and Chief Executive Officer, Association of American Railroads 158
Pomeroy, Hon. Earl, a Representative in Congress from North Dakota, accompanied by Jeannette Klier 152
Rodzwicz, Edward W., President, Teamsters Rail Conference 158
Timmons, Richard F., President, American Short Line and Regional Railroad Association 158
Van Dyck, Sharon L., American Association for Justice 158
Wytkind, Edward, President, Transportation Trades Department, AFL-CIO 158

PREPARED STATEMENTS SUBMITTED BY MEMBERS OF CONGRESS

Brown, Hon. Corrine, of Florida 194
Costello, Hon. Jerry F., of Illinois 199

PREPARED STATEMENTS SUBMITTED BY WITNESSES

Hamberger, Edward R. 200
Rodzwicz, Edward W. 233
Timmons, Richard F 246
Van Dyck, Sharon L 253
Wytkind, Edward 258

SUBMISSIONS FOR THE RECORD

Hamberger, Edward R., President and Chief Executive Officer, Association of American Railroads:
Response to a question from Rep. Brown 221
Response to a question from Rep. Napolitano 225
Response to questions from Rep. Walz 230
Timmons, Richard F., President, American Short Line and Regional Railroad Association, responses to questions from Rep. Brown 249

ADDITION TO THE RECORD

Institute of Makers of Explosives, Cynthia Hilton, Executive Vice President, letter, February 15, 2007 266

REAUTHORIZATION OF THE FEDERAL RAIL SAFETY PROGRAM

Tuesday, January 30, 2007,

HOUSE OF REPRESENTATIVES, COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, SUBCOMMITTEE ON RAILROADS, PIPELINES AND HAZARDOUS MATERIALS, WASHINGTON, D.C.

The subcommittee met, pursuant to call, at 2:00 p.m., in Room 2167, Rayburn House Office Building, the Honorable Corrine Brown [Chairwoman of the subcommittee] presiding.

Ms. BROWN. Good afternoon. The Subcommittee on Railroads, Pipelines and Hazardous Materials will come to order. And thank you.

[Applause.]

Ms. BROWN. Before I begin, I want to introduce my school board member from Orlando, Cat Gordon. Cat, would you just stand up? I know this is unusual.

[Applause.]

Ms. BROWN. And I have school board members from Jacksonville, Florida. Would you all stand up?

[Applause.]

Ms. BROWN. So at any rate, they're watching me.

[Laughter.]

Ms. BROWN. The Subcommittee is meeting today to hear testimony on reauthorization of the Federal Rail Safety Program. Since this is our first meeting of the 110th Congress, I believe this is a good opportunity to outline the near-term agenda of the Subcommittee, and our efforts to address many of the transportation challenges facing this Country.

First, let me say how pleased I am to serve as the Chairwoman of the Subcommittee on Railroads, Pipelines and Hazardous Materials. I have loved the railroads since I was a child watching the Silver Meter pass by my house every day. And I often tease members, pass through my house, we were just that close to it. I am also pleased to have the opportunity to work with my Republican colleague, Congressman Bill Shuster of Pennsylvania. And you can rest assured that the Transportation Committee is one committee in this House and this Subcommittee that will be run very bipartisan. We will work together for the good of the people of this Country. Thank you for being the Subcommittee Ranking Member.

The Subcommittee will have an active agenda in the coming weeks and months, starting with the reauthorization of the Rail Safety program. I have scheduled these two days of hearings to give members adequate time to examine the state of rail safety in

the U.S. Additionally, hearings are scheduled for February, including a February 13th hearing on fatigue in the rail industry. It is my hope that we can build upon the past bipartisan efforts of the Subcommittee and move a rail safety bill through the Committee to the floor of the House before the Memorial Day district period.

Congress last passed legislation to reauthorize the Federal Railroad Administration in 1994. That reauthorization expired in 1998. Since that time, the railroad industry has changed dramatically. Economic growth and the increase in international trade have led to record traffic levels. At the same time, Amtrak and commuter railroads, which often operate on freight rail lines, are moving more passengers, which means that the system is a lot of pressure on our rail system. This has a significant impact on workers and public safety.

According to the FRA, train accidents have increased by 33 percent since 1994. Fatalities and injuries have also increased from 12 fatalities and 262 injuries in 1994 to 33 fatalities and 734 injuries in 2005. It hit an all time high at 1,884 in 2002, due to a train accident in North Dakota. On the other hand, grade crossing accidents and relative fatalities and injuries have decreased.

Of course, when looking at those numbers, we also have to consider the increase in train traffic from 650 million train miles in 1994 to 790 million train miles in 2005. So we have to look at accident rates. According to the FRA, the train accident rates have increased since 1994, while the grade crossing incident rates have decreased and leveled off since 2002. Forty percent of all train accidents are the result of human factors. Thirty percent are the results of defective tracks.

I am interested in hearing what the FRA is doing to reduce accidents and what Congress should do to improve the Federal Rail Safety program.

Before I yield to Mr. Shuster for his statement, I want to mention that we have a few members returning to the Subcommittee, and a fair number of new members joining us this year. I am looking forward to getting to know each of my colleagues, learning about their needs and working together to address their many concerns.

Mr. Shuster?

Mr. SHUSTER. Thank you, Madam Chairwoman. First of all, I want to congratulate you on your chairmanship. It is going to be a pleasure working with you. You and I have worked in the past on the T&I Committee. I know you work hard at it, and I certainly am looking forward to working with you in a bipartisan way on the Subcommittee of Railroads, Hazardous Materials and Pipelines.

My last Congress, I served on the Economic Development, Public Buildings and Emergency Management Subcommittee. I think Ms. Norton can attest to the fact that we worked very bipartisanly on that subcommittee and as I said, I look forward to continuing that work here. As you mentioned, this Committee and all the subcommittees have been able to do that over the history of this Committee.

I would also like to welcome our new members that are new to the Committee. That's Mr. Gilchrest from Maryland, Mr. Johnson of Illinois, Mr. Gerlach from Pennsylvania, and Mr. Diaz-Balart

from Florida, as well as all of our new Democratic members. I look forward to working with each and every one of them.

Today's hearing is on the reauthorization of the Federal Rail Safety program. This subject is both timely and of great personal interest. Our Nation's economy depends on the efficient freight transportation system. This is especially true in my home State of Pennsylvania, where many industries rely on the freight rail industry. The safe movement of passengers is also a major concern. In Pennsylvania, the Keystone Corridor from Harrisburg to Philadelphia was recently upgraded to a high speed rail of 110 miles per hour, and we hopefully will see more of those types of projects in the near future. And so far today, it has been a great success with increased passengers riding that train.

America already has one of the safest rail systems in the world, and according to the latest statistics, last year was one of the best on record. I think it is important that when we look at the raw numbers, we look at those rates. I think it is clearly, when you look at the rates, the increased traffic, increased freight, that this has been an extremely safe year. I don't know that the numbers for 2006 are out yet, but it appears it is going to be the same as 2050 or even better. We have to make sure that we keep it that way.

I want to compliment the folks at the Federal Railroad Administration, the railroads, and in particular, the employees of the railroads. Because that is why we see these fantastic results, all of them working together to make sure that we have a safe rail system in this Country. We can't rest, we can't sit back on our laurels. We have to look forward to seeing and hearing how we can make our railroads even safer.

I look forward to the testimony of our distinguished witnesses today. We all appreciate their expertise and their commitment to rail safety. Once again, congratulations, Chairwoman Brown. I am really looking forward to the coming weeks and months working with you.

Ms. BROWN. Thank you.

Ms. Napolitano, from California.

Ms. NAPOLITANO. Thank you, Madam Chairwoman. I wanted to be one of the new old Subcommittee members, I have been wanting Transportation for many years. I thank you for the opportunity and look forward to working with you on all the issues.

Madam Chairwoman, I ask to submit a statement of Mr. Steve Larson, the Executive Director of the California Public Utilities Commission, regarding the important role that States can play in protecting their citizens by ensuring safe rail operations.

Ms. BROWN. Without objection, so ordered.

Ms. NAPOLITANO. Thank you, Madam Chairwoman.

My district is home to the Alameda Corridor East rail lines. Union Pacific and Burlington Northern both have great traffic that brings 40 to 50 percent of the Nation's goods through my whole district. There is over 35 miles, just in one area alone. They of course distribute $314 billion in annual trade through those rail lines and impact 1.9 million residents in 30 cities. The fact that the last couple of years I have had five derailments, three within my area and two just outside my area, indicates to me that there were some issues, and I was very heavily involved with the railroad in making

sure that does not happen again. Thank God, we have been accident free for a year and a half.

The fact that we feel that FRA must implement stricter rail safety regulations by forcing more frequent track inspections and better maintenance, and utilizing new technology to inspect areas of track that are currently inaccessible. Also including the research and development to ensure that the joint bars are something that are taken care of, which is a great issue in my area. We can go to the moon, but we have not been able to find a way to inspect the joint bars.

Increase the staffing and reduction in fatigue in hours of service. Conversations not only with the rail folks and some of the other labor groups indicate that there are loopholes. And we need to ensure the safety not only of our employees on the railroad, but also the people that drive through, if you will, where there are trains. We need to ensure slower and quieter traffic through urban areas. I have nothing but urban. We need to impose tighter standards for transporting hazardous materials to prevent unnecessary deaths. And we also must assist communities in being able to work out how do we improve grade crossing safety, if we are not going to do grade separations.

And then of course, we want to ensure that States must be given power to assist in railroad safety. Many States offer additional inspectors and accident prevention training. Why are we not utilizing that to a greater degree?

We look forward to having FRA work with States to improve safety on behalf of all of our communities. And of course, grade separations, ensuring that rail crossings, which are the leading cause of traffic delays and accidents, are operated, built to improve the ability for the cities to continue their business. There are 54 grade crossings along the Alameda Corridor East, in my area alone, 54. The Alameda Corridor East Construction Authority has 10, 8 working, 2 completed, 10 unfunded to do and the other 34 are nil. That means my transportation emergency vehicles are going to be at a standstill, because there is no way around it. And we need to ensure that while we are serving the rest of the Country, that my district is not impacted unnecessarily.

We support whatever the Subcommittee chair is proposing, and look forward to working on this issue with all of us, both sides of the fence. Thank you, Madam Chair.

Ms. BROWN. Thank you, and thank you for joining the Committee.

I want to welcome Mr. Mica, the ranking Republican Member of the full Committee. I recognize him for any remarks he may care to make.

Mr. MICA. Thank you so much, Ms. Brown, and congratulations on assuming the Chair of this very important Subcommittee of the Transportation and Infrastructure Committee. Ms. Brown and I were elected together some 14 years ago. We share a very common geographic area and a lot of people with the same concerns and needs. They all are very proud of you now in assuming this important responsibility.

I am also pleased to have named Mr. Shuster, the ranking Republican member. I am very proud of him. He has chaired one of

our other subcommittees. I will not be here to see it, but I know his picture will be up, actually we could take his dad's down some day and put his up there. Don't tell him I said that.

He won't until he reads the will.

[Laughter.]

Mr. MICA. But we know he will do a good job, and working together we can get a lot done.

And also just a moment for the good of the order, I want to thank members on both sides of the aisle who are here, I see Mr. DeFazio over there, in learning that we are going to fully fund our TEA-LU obligations for highway. I thank everyone. Seventy-three members, the largest committee in Congress, signed a letter jointly, Republicans and Democrats. I learned that that has been announced. We need to keep it in there, though, as it goes over to see our friends on the other side of the aisle.

But I do thank everyone for their cooperative effort and success so far.

Again, I want to address just for a minute the subject of today's hearing. This of course is the reauthorization of our Federal Rail Safety program. The Railroad Subcommittee conducted several safety oversight hearings during the past two Congresses. And each here, and we found that our Rail Safety program has made some significant progress. I think that the Chairwoman has shown some of the progress we have made.

Now, there is always room for improvement. And as we move forward in reauthorization, I would like to set out a couple of principles that I think we should follow. First, as the famous President said, Ronald Reagan, if it ain't broke, don't fix it. We have to make certain that our current program, we build on its successes in safety and that we improve on that, our safety record over the coming years. If we propose to try, and I am not disposed to not trying something new, let's make certain it is going to work and be effective.

Any new program must be based on the latest science. The Federal Railroad Administration has done a great deal of safety research over the past few years, particularly on the important question of worker fatigue. This research could serve as the basis for replacement of our antiquated hours of service law, which dates back, believe it or not, to 1907, 100 years old.

My second principle for rail safety reauthorization is the avoidance of unnecessary bureaucratic regulations, i.e., red tape. The Government is great at making people file more and more paperwork. But paperwork does not always enhance safety. What we truly need is a program to fund advanced safety technologies, such as the T18 track inspection car, developed by the FRA. We should also be encouraging the installation of state of the art positive train separation controls, which can eliminate the cause of a lot of our problems, human-caused collisions.

In closing, I would like to note that one of the worst-run railroads, couldn't do this, couldn't get through a Rail Subcommittee hearing without saying something about Amtrak, one of the worst-run railroads in the Country is our own Amtrak. During our Committee oversight process in the last few years, we have found numerous safety, mismanagement and maintenance problems in Am-

trak's mechanical department and some of their other operations. Some of these issues have been addressed, but Amtrak, again, our Government-run passenger service, long distance service and high speed service, needs to do much more.

I should note that my staff and I have spoken in the past to President Alexander Kummant and have been assured that Amtrak will address pending safety concerns, like even getting brakes that fit Acela. I call on the Federal Railroad Administration to take a closer look at Amtrak's safety record to ensure that it has taken every possible corrective action. That is important, because it is not just freight, it is people that we move on Amtrak.

So with those comments, thank you for hearing me out, and congratulations again.

Ms. BROWN. Thank you, Mr. Mica, Ranking Member of the full Committee. I am looking forward, as always to working with you. And I want to be clear, Mr. Shuster, that you tell your daddy that I didn't recommend taking his picture down. I want to be clear on that.

[Laughter.]

Ms. BROWN. I want to yield now to Mr. DeFazio from Oregon.

Mr. DEFAZIO. Thank you, Madam Chair. Congratulations upon assuming the Chair and I have no opening remarks. I am looking forward to hearing from the witnesses. Thank you.

Ms. BROWN. We have sufficient time to put any other remarks into the record.

I would like to, it is my pleasure to welcome Congressman Gonzalez to the hearing this afternoon. The Congressman has spoken with me about a number of fatality accidents that occurred in his district, and I thought it would be helpful for him to share his concerns with the rest of the Subcommittee as we begin. So welcome.

TESTIMONY OF THE HONORABLE CHARLIE A. GONZALEZ, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. GONZALEZ. Thank you very much, Madam Chairwoman Brown, and congratulations to you, and of course, to Ranking Member Shuster and members of the Committee, thank you for the opportunity of appearing before you.

I have been in communication with members of this Committee for the past few years regarding situations in my district, which is half of San Antonio and the surrounding areas, of course. What would be my interest in rail safety? May 2004, a derailment near Brackenridge High School, 5,600 gallons of diesel fuel are spilled near the San Antonio River. Thank God, four tank cars carrying propane do not rupture.

June 2004, Macdona, Texas, which is the southwest side of San Antonio. A 40-car derailment, toxic chlorine gas tank ruptures. The conductor and two residents die. Fifty people are hospitalized.

September 2004, derailment near Brackenridge High School again. Luckily, no spills.

November 2004, train collides into the Crystal Storage Company building. An accountant sitting at his desk is crushed to death.

February 2005, in San Marcos, Texas, 40 miles north of my district, a seven-car derailment. Tank cars carrying hazardous mate-

rials requiring the evacuation of 200 residents. Again, we are lucky that no cars ruptured.

October 2006, in the heart of my district, down the street from where I live. Two homes, after a 17-car derailment, two homes are struck and one actually has to be demolished because it wasn't up to code after that.

What have I learned from those particular experiences? I believe that railroad companies pretty well police themselves. There is a lack of oversight by the Federal Railroad Administration and that the Federal Railroad Administration is not aggressive, it is not proactive and many times not engaged, which results in railroad companies not compelled to adopt policies or invest in technologies to improve rail safety.

I also recognize the FRA has new personnel. It is under a different watch and I will defer to that. I am talking about some previous experiences with different personnel at the FRA.

What were some of the problems or issues that were easily identified? FRA is ill-equipped to investigate accidents. The NTSB cannot take up the slack, and that was in conversations with the NTSB. They did not say that in so many words. But if you look at the number of personnel that they have to assist in the investigations of rail accidents, it is an easy conclusion to arrive at.

Employee fatigue. Current regulations fail to address unwise or abusive practices. I think the Ranking Member has already made reference to that. It is, I guess, incomprehensible that we have not done anything earlier on this.

A lack of utilization of positive train controls which override human error, which if in fact, a large percentage of the accidents are due to human error, fatigue and so on, then why aren't we making that investment in that type of technology that will override that type of error?

Proper car placement, tank cars being placed away from other cars that could result in puncturing the tank cars. And of course, the placement of cars based on weight and so on.

Improved standardized derailment statistics. Definitions, reporting periods and so on. And easier access to that information by the general public. What am I referring to? I think you all are more knowledgeable about this than I am. But I was looking at statistics. And they said 2005, there were only 33 fatalities at all of these accidents throughout the United States. And that was incredible to me. I didn't understand why the number could be so low, when I had heard that the fatalities numbered more in the 700 range.

That conductor that died in San Antonio, the two residents that died as a result of chlorine poisoning, the accountant that was crushed to death by that train, are not part of the 33 fatality statistic. And you say, how is that possible? Because the only ones that are counted, they have to be on the train as a passenger or as an employee and you have to die as a result of the accident itself. Now, if you are in a car, you are not one of those fatalities. If you are the resident inhaling the toxic fumes and you die, you are not counted. If you are the conductor or the engineer that jumps off the train after the accident and still dies in the gaseous cloud, you're not counted as a fatality.

Now, I know that we will have those statistics somewhere else. But let's try to have some reason in arriving at what would be reasonable, comprehensive statistics and reporting. Improved safety and security of remote control operated trains continues to be a concern. I recognize that some of these issues have been addressed of late, but have gone too long ignored. This would be my only caution as we proceed, and I commend you that you are taking the interest early.

FRA recommendations to railroad companies do not equate to actual regulations. Two, you may hear that last year, the Nation's rail system was on pace to set an annual safety record. All I say to that is, as compared to what? We cannot have the attitude that it could be worse, because that is what I always encounter. Well, it was bad, but it is not as bad as it used to be, or it could be worse. I know that the public demands more, and I am hoping that this Congress will provide more.

Again, thank you very much, and I will remain here if you have any questions.

Ms. BROWN. Thank you, Mr. Gonzalez. I guess I just have one.

As the Subcommittee plans for reauthorization of the Federal Rail Safety program, what areas are in need of revision or reform, if there were just one or two things that you think need to happen?

Mr. GONZALEZ. There has to be a priority list, and I understand that, Madam Chair. But I always, in thinking through where is that information, it is so easily accessible, because all the investigations have been made and all the recommendations have been made. NTSB, just the safety recommendations that arose out of the accident in Macdona where we lost three individuals, address the issue of crew fatigue, including hours of service and scheduling issues that take into account crew limbo time, disrupted processes and unpredictability of the work schedules.

Adopt positive train control systems, which we have touched on. Examine the impact resistance of steels used in pressure tank cars built before 1989 that are still in service. Develop tank car specific fracture strength standards, taking into account that these rail lines are not going to be relocated in all probability, and they still will be going through highly populated areas. The other is implement measures that would minimize forces should an accident occur, such as positioning the tank cars away from other cars that could actually cause a puncture, which are covered. And of course, providing escape breathing apparatus for personnel.

I would also be looking at how the FRA is going to deal with what I refer to as the disciplinary action, or the corrective action, as opposed to the way that they have done it in the past, where they reach these agreements, but nothing ever really occurs. I do not think they are really followed, I do not think they are scrutinized, and I do not think that anything happens for failure to comply.

So it is just a smorgasbord out there that this Committee needs to establish the priorities.

Ms. BROWN. Thank you.

Mr. Shuster, do you have any questions?

Mr. SHUSTER. No, ma'am, no questions. Thank you.

Mr. GONZALEZ. Thank you.

Ms. BROWN. Ms. Napolitano?

Ms. BROWN. Congressman, on the derailings in your district, were there any specific concerns with the life of the rail, or any of the performance of the joint bars, besides the fatigue?

Mr. GONZALEZ. My understanding is that there was some allegation about the condition of the tracks, but I do not think that was found to be a valid concern. There were some considerations regarding the signals and such. That investigation of the Macdona incident is quite interesting, that is the findings of the National Transportation Safety Board.

But no, I do not believe, and we have individuals from the Board here that could elaborate on that. I don't believe the condition of the tracks or the equipment that was used was at fault.

Ms. NAPOLITANO. Thank you, Madam Chair.

Ms. BROWN. Thank you very much, Mr. Gonzalez, for coming.

Mr. GONZALEZ. My pleasure. Thank you.

Ms. BROWN. Would our second panel please come forward?

We are pleased to have a distinguished panel of witnesses this afternoon. Before I introduce them, I will ask unanimous consent to allow 30 days for all members to revise and extend their remarks and to permit the submission of additional statements and materials by members and witnesses.

Without objection, so ordered.

I would like to welcome the Honorable Joseph Boardman, who is the Administrator of the Federal Railroad Administration. Welcome.

We will have the Honorable Robert Sumwalt, who is Vice Chairman of the National Transportation Safety Board. He is accompanied by Bob Chipkevich, who is the Director of the Office of Railroad, Pipelines and Hazardous Materials Investigations at the NTSB.

And we have the Honorable Calvin Scovel, who is the Inspector General of the U.S. Department of Transportation.

Finally, we have Ms. Katherine Siggerud, who is the Director of Physical Infrastructure Issues for the U.S. Government Accountability Office.

Let me remind the witnesses to limit their oral statements to five minutes. Your entire statement will appear in the record. We will also allow the entire panel to testify before questioning.

Administrator, you may begin.

TESTIMONY OF THE HONORABLE JOSEPH H. BOARDMAN, ADMINISTRATOR, FEDERAL RAILROAD ADMINISTRATION; THE HONORABLE ROBERT L. SUMWALT, III, VICE CHAIRMAN, NATIONAL TRANSPORTATION SAFETY BOARD, ACCOMPANIED BY BOB CHIPKEVICH, DIRECTOR, OFFICE OF RAILROAD, PIPELINES AND HAZARDOUS MATERIALS INVESTIGATIONS, NATIONAL TRANSPORTATION SAFETY BOARD; THE HONORABLE CALVIN L. SCOVEL, III, INSPECTOR GENERAL, U.S. DEPARTMENT OF TRANSPORTATION; KATHERINE SIGGERUD, DIRECTOR OF PHYSICAL INFRASTRUCTURE ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Mr. BOARDMAN. Madam Chairwoman, I also congratulate you. Being here the last year, and I think the most often witness, I

know you were sitting on the other side, and congratulations. Thank you for having me here today.

Ranking Member Shuster, I also appreciate being here with you today and all the members.

And the full Committee Chair, Mr. Oberstar, thank you for being here.

In your opening remarks, Madam Chairwoman, you talked about the fact that the reauthorization bill expired in 1998. We are allowed, as FRA, because of the Appropriations Act that we deal with each year, to have the legislative and legal authority to operate the safety program for the United States. DOT submitted proposals in 1998 and 1999 and 2002 and in 2003 for a reauthorization of the bill, but none of those were accepted or adopted. No action occurred in the 108th or 109th Congress, except for S. 1402. The FRA has a proposal in clearance now, and we look forward to working with the Committee on the bill in the future.

The leadership of this Department and this Agency has changed. The most recent change in leadership in the Department is a new Secretary, Mary Peters. Her interest and support in rail safety generally, and rail safety specifically, are very strong and I appreciate being here for her. The FRA is to rail, quite frankly, because of the railroad model, what the FHWA and what the FMCSA and the NHTSA operations combined are to roadways. In addition, private railroads handle their own tasks, tasks that in the highway model are done by the State DOTs for the highways, and by the FAA for aviation. Railroading is much older than that.

In many of the safety areas themselves, tank cars as an example, the railroad industry has an important safety delegation that they've been handling for 40 years or more before the DOT had actually been in existence. And yet the most important part of what I want to talk about today are the FRA and its people. The people that do a job with excellence, with integrity, with teamwork and with partnerships, whether it's with a State or the industry or among themselves and among these agencies.

We are staffed at approximately 800, with 500 of them in the field, an inspection staff of approximately 400 in 8 regions who are experts in track, signal and train control, motive power and equipment, operating practices, and hazardous materials. We have 18 full-time grade crossing specialists and supervisory and support staff.

It is a small agency, but it demonstrates an ability to deliver, I think, big results. Especially with our State partners, there are another 160 inspectors out in the field as well.

The FRA works every day to reduce both the frequency and severity of railroad accidents. And real progress, I can tell you, is being made in implementing our National Rail Safety Action Plan and our Grade Crossing Action Plan. Passenger safety rulemaking and other key initiatives are also making railroads safer today.

In the National Rail Safety Action Plan, the strategy was to target the most frequent, high-risk causes, focus oversight and inspection better, and accelerate research to reduce risk. Our initiatives encompassed, and I will talk a little bit about that in my answers, I think, to reduce human factor accidents, improve track safety, im-

prove hazmat safety and preparedness, better focus our inspections and improve highway rail grade crossing safety.

I appreciate the opportunity to speak today and I will answer your questions as you choose.

Mr. SUMWALT. Good afternoon, Chairwoman Brown, Ranking Member Shuster and members of the Subcommittee. I am Robert Sumwalt, I am the Vice Chairman of the National Transportation Safety Board. With me today is Mr. Bob Chipkevich, Director of the NTSB's Office of Railroad, Pipeline and Hazardous Materials Investigations. Thank you and your staff for focusing on the important issue of safety of our Nation's railways.

Let me begin by saying that railroad fatigue is an important issue at the Safety Board. Fatigue has been on our most wanted list since 1990, and as you know, fatigue is widespread in every mode of transportation, especially rail crashes. The Safety Board most recently addressed this issue in the collision of two freight trains at Macdona, Texas in 2004 where three people died from chlorine gas inhalation. The Safety Board determined that train crew fatigue was the probable cause of the accident. Contributing to their fatigue was the train crew members' failure to obtain sufficient rest prior to reporting for duty because of their ineffective use of off-duty time and train crew member scheduling practices that inverted the crew member rest periods. The unpredictability of train crew member work schedules may have encouraged them to delay obtaining rest.

The Safety Board also found that the minimum rest periods prescribed by Federal regulations do not take into account either the rotating work schedules or the accumulated hours spent working and in limbo time. As a result of this investigation, the Safety Board recommended that the FRA require railroads to use scientifically based principles when assigning work schedules to train crew members.

The Board also recommended that the FRA establish requirements that limit train crew member limbo time. The FRA responded that it lacked the statutory authority to adopt the requirements contemplated by either of these recommendations.

I would like to now briefly discuss transporting hazardous materials by rail. Following catastrophic railroad accidents in the 1970s, safety mandates, such as shelf couplers, head shields and thermal protections have improved the performance of tank cars during derailments. However, despite these improvements, recent accidents such as those in Macdona, Minot, North Dakota and Graniteville, South Carolina, have all raised new concerns about the safety of transporting hazardous materials in tank cars.

The Minot accident resulted in the catastrophic failure of five tank cars. The nearly instantaneous release of almost 150,000 gallons of anhydrous ammonia created a toxic plume that affected nearly 12,000. The low fracture toughness of the steel used for the tank shell cars that catastrophically ruptured contributed to their complete fracture and separation. The Board issued four safety recommendations to FRA to improve tank car performance.

In 2005, a train in Graniteville, South Carolina encountered an improperly aligned switch, resulting in a head-on collision with a parked train. A tank car filled with chlorine was punctured and a

vapor cloud filled the area. Nine people died as a result of chlorine gas inhalation and approximately 5,400 residents were evacuated for days. The Board found that the steel in the tank shell of the punctured chlorine car in Graniteville had a fracture toughness that was significantly greater than the toughness of the ruptured cars in Minot. These improved steel qualities in the Graniteville accident did limit the size of the tank rupture, but it also demonstrated that even the strongest tank cars in service today can be punctured in accidents involving moderate train speeds.

Therefore, we recommended that the FRA require operating measures, operating measures such as positioning tank cars toward the rear of trains and reducing speeds through populated areas to minimize impact forces from accidents, and to reduce the vulnerability of tank cars that are carrying gases that are poisonous by inhalation. However, we are disappointed in the FRA's lack of enthusiasm to closely examine how operational measures can be used to reduce these risks.

Finally, the need for positive train control systems has been on our most wanted list for 17 years. Our accident investigations have long identified human performance failures, and PTC provides needed safety redundancy to compensate for human error. Last year, several railroads announced that it is time for the industry to move forward on PTC. And on January 8th, the FRA announced its approval of a positive train control system for a major railroad, over 35 specific lines in 17 States.

The Board is encouraged by these recent developments and we urge the industry to move aggressively to install these systems.

Madam Chairman, this completes my statement and I look forward to your questions at the appropriate time. Thank you.

Ms. BROWN. Thank you. Mr. Scovel?

Mr. SCOVEL. Chairwoman Brown, Chairman Oberstar, Ranking Member Shuster and members of the Subcommittee, we appreciate the opportunity to testify today on the reauthorization of the Federal Railroad Safety Program.

I wish to note that I am new to the position of Inspector General in the Department of Transportation. I have identified surface safety as a key area where the Office of Inspector General can make a significant contribution to the work of the Department and to the Congress' oversight responsibilities. I am pleased that my first opportunity to testify before Congress may assist this Subcommittee in its important work in improving rail safety.

As the FRA Administrator noted today, the rail industry's safety record has improved, but significant train accidents continue to occur and the train accident rate has not shown sustained improvement in recent years. Although 2005 saw a downtick, the overall data for 1995 through 2005 show that train accidents increased by 31 percent and the rate of train accidents per million train miles traveled grew by 11 percent.

Today, I will focus on two issues that we see as key for reauthorization--(1) improving grade crossing safety and (2) better targeting of FRA's oversight by identifying patterns of safety problems through data analysis.

On average, one person dies and three people are injured in the United States every day in grade crossing collisions. This category

ranks second highest on the list of causes of train accident fatalities, exceeded only by trespassers. Grade crossing collisions resulted in 42 percent of all train accident fatalities from 1995 through 2005.

The railroads and FRA, and in some cases states can do five things to further reduce collisions and fatalities. First, ensure compliance with reporting requirements. Our ongoing work continues to identify significant problems with the completeness of reporting by the railroads to both the National Response Center and FRA's accident reporting system. For serious collisions, immediate notification to the National Response Center is required.

We found, however, that between May 2003 and December 2004, 21 percent of serious collisions were not reported. Further, timely and accurate reporting to FRA's accident reporting system, where all grade crossing accidents are required to be reported, ensures that FRA and the states have information on which to identify dangerous crossings and emerging accident trends. Yet, we identified 12 railroads between 1999 and 2004 that did not report 139 grade crossing collisions to FRA on time. Some were reported nearly 3 years late. This is clearly an area where additional enforcement and civil penalties should be considered.

Second, develop strategies to increase FRA's involvement in grade crossing collision investigations. FRA does not have the resources to deploy inspectors to the site of every grade crossing collision. As a result, FRA relies heavily on reports submitted by the railroads themselves. We have recommended that FRA take additional steps to broaden its review of those reports, for example, by verifying information supplied by the railroads using information obtained from independent sources such as police reports. Although FRA has stepped up its efforts in the last 2 years, it investigated less than 1 percent of collisions which highlights the need for verification of railroad-supplied information.

Third, work with states to establish laws to address sight obstructions. Our work identified 27 states that currently lack state-level laws addressing sight distances at grade crossings where no active warning devices are present. FRA data show that sight obstructions, such as vegetation growth, may have contributed to 688 collisions from 2001 to 2005. FRA should establish national standards in this area and promote state laws adopting them.

Fourth, establish mandatory reporting requirements for FRA's national grade crossing inventory system. In June 2004, we recommended that the Department improve the accuracy and completeness of FRA's national grade crossing inventory, particularly the identification of all public grade crossings and the type of warning devices in place, in order to better monitor high-risk crossings and make improvements. An accurate inventory is also important because SAFETEA-LU funding is tied to the number of crossings. This will require joint action by the Federal Highway Administration and FRA.

Fifth, require states with the most dangerous grade crossings to develop and an action plan. This past year, FRA worked with Louisiana on what appears to us to be a successful pilot project on a grade crossing safety action plan. FRA should aggressively expand this effort to other states.

Now, let me turn to the second issue we see as key for reauthorization. FRA must aggressively implement its data-driven approach and trend identification. By using trend analysis to track predictive indicators and problem areas, FRA could identify potential safety ″hot spots.″

Chairwoman Brown, I see that I am almost out of time. If I may ask for another minute, I think perhaps I can wrap up.

Ms. BROWN. Without objection.

Mr. SCOVEL. Thank you.

For example, circumstances related to the January 2005 Norfolk Southern hazmat accident in Graniteville, South Carolina, both illustrate and underscore the value of trend analysis. Even though FRA began issuing safety advisories 5 days after this accident, this was a reactive measure. Had FRA used the data it already had--that switch problems started trending up in 1997 and took a large jump in 2003--it could have addressed these problems at least 2 years before the accident occurred.

FRA has taken action on the recommendations contained in our previous reports. As the Administrator stated in his testimony, FRA recently launched its National Inspection Plan. This is a step in the right direction. It is too soon, however, to tell exactly how effective these measures will be in the long term. We plan to audit FRA's progress as it continues to implement its National Inspection Plan.

Chairwoman Brown, that concludes my statement. I would be pleased to answer any questions.

Ms. BROWN. Thank you.

Ms. Siggerud?

Ms. SIGGERUD. Madam Chairwoman, Chairman Oberstar and Ranking Member Shuster and members of the Subcommittee, thank you for inviting me to participate in this hearing today to discuss FRA's rail safety oversight activities.

In recent years, a number of serious accidents raised concern about the level of safety in the railroad industry. In contrast to previous decades, during the past 10 years, we have not seen much progress on reducing the rate of train accidents. While we saw that FRA has recently undertaken or planned several actions that look promising, I would emphasize that it is important to make progress and soon on rail safety.

My statement today is based on a report we issued last Friday that provides an overview of FRA's safety program. Our report covered three topics. First, how FRA focuses its efforts on the highest priority risks and planning of safety oversight; second, how FRA identifies safety problems on railroad systems; and third, how FRA assesses the impact of its oversight efforts. With regard to focusing on the highest priority risks, FRA has undertaken or planned initiatives that are aimed at addressing the main causes of accidents. The agency's overall strategy for targeting its oversight is the National Rail Safety Action Plan, issued in 2005. In our view, this plan includes elements of a reasonable framework for guiding the agency's efforts.

In 2005, 72 percent of our train accidents were attributable either to human factors or track defects. FRA has initiatives to address both these causes. These include new regulations on em-

ployee errors, such as improperly positioned switches and the new fatigue model that can be used by railroads to improve train crew scheduling practices. For track, FRA is acquiring two additional track inspection vehicles that can precisely track and also has developed new regulations on inspecting continuous welded rail track.

However, most of these initiatives have not yet been fully implemented and their impact on safety will probably not be apparent for a number of years. Furthermore, several of these key efforts depend on voluntary action by railroads.

In addition, FRA has already initiated a new approach for planning inspections that uses trend analyses of accident inspection and other data in order to focus inspectors' efforts on locations that are likely to have safety problems. This approach allows FRA to better target the greatest safety risks and to make more effective use of its inspectors. However, it is not clear yet whether the new approach will lead to prioritization of inspections across the Nation or yet to improve safety.

Turning now to how FRA carries out its safety oversight, the agency identifies safety problems mainly through routine inspections that determine whether operating practices, track and equipment meet minimum safety standards. Because FRA is a small agency in relation to the railroad industry, FRA's inspections can cover only about 0.2 percent of railroads operations each year. These inspections do identify violations and result in railroads paying fines and taking corrective actions.

However, the inspections are not designed to determine how well railroads are managing the types of safety risks throughout their systems that can lead to accidents. Other organizations, such as the American Public Transportation Association, ##@@## and DOT and Transport Canada have implemented approaches to oversee the management of safety risks by U.S. commuter railroads, pipelines and Canadian railroads, respectively. Such risk management programs require the industry to improve system-wide safety by identifying and assessing safety risks and prioritizing them, so that their resources may be allocated to address the highest risks first. These oversight approaches complement, rather than replace, traditional compliance inspections, and therefore provide additional assurance of safety.

With regard to how FRA assesses the impacts of its oversight efforts on safety, the agency uses a broad range of goals and measures. For example, it has recently developed new goals that target its inspections and enforcement efforts at reducing various types of accidents, and measures to track its progress. However, FRA lacks measures in the direct result of its inspection and enforcement program, such as to the extent to which they have resulted in correction of safety problems.

Under FRA's current focus enforcement policy developed in the mid-1990s, inspectors cite a small percentage of their identified defects, about 3 percent in 2005, as violations that they recommend for enforcement action, generally through civil penalties. This policy relies on cooperation with the railroads to achieve compliance and it is intended to focus FRA's enforcement efforts on those instances of non-compliance that pose the greatest hazard. However, it is not clear whether the number of civil penalties issued or their

amounts are having the desired effect on improving compliance. Because it has not evaluated its enforcement program, FRA is missing an important opportunity to obtain valuable information about its performance and any need for adjustment of the programs.

In the report we issued last week, we recommended that FRA first develop and implement measures as a direct result of its inspection and enforcement programs and second, evaluate these programs. As part of our recommendation follow-up activity, we will work toward FRA's adoption of these recommendations.

Madam Chairwoman, that completes my statement. I am happy to answer any questions you may have.

Ms. BROWN. Thank you.

Now, it is my pleasure to introduce our distinguished full Chair, Mr. Oberstar. Let me just note that Mr. Oberstar started in this Committee, as a staffer, 44 years ago, and now he is going to have his picture up on the wall.

[Laughter.]

Ms. BROWN. Mr. Oberstar. And in your remarks, will you give us an update on the funding of TEA-LU?

Mr. OBERSTAR. Thank you, Madam Chair. Congratulations on your first hearing. You have demonstrated your commitment to the rail issue over the several years that you have served on the Committee on Transportation and Infrastructure, and you served as the Ranking Member in the last two Congresses. I am very impressed with your work and commitment to the issues of rail and rail safety. I congratulate you on assuming the chairmanship. You have your work cut out for you, it is going to be a very busy session.

And I want to welcome Ranking Member Shuster in this new capacity. He was chair of the Economic Development and Public Buildings Subcommittee in the past Congresses. I know that big rail yard in his district where we had a hearing early on in his service in Congress, he has a very deep personal and professional district interest in rail and rail management and rail safety issues.

We are going to have a very busy session of Congress on rail issues and spend a good deal of time on the wide range of matters, including Amtrak, which will be a subject of this Committee's affections in the coming session.

I should also express my appreciation to Mr. LaTourette for his chairmanship. I did that this morning at the Coast Guard hearing, but thank you again for your leadership over the past several years on the Rail Subcommittee issues.

I was very interested, I read through at length, Mr. Boardman, your list of initiatives that FRA has undertaken. I want to compliment you on the action taken. I must say that many of these have been a long time coming. Some were in the works, other initiatives have been on the shelf for quite some time. But you are certainly moving in the right direction. I want to, as I have done previously, emphasize the human factors in rail safety. Not just in rail safety, but in trucking, in aviation, in maritime, in inland waterway navigation systems, in everything in transportation. Airline pilots, flight attendants, air traffic controllers all are subject to the limitations of the human body, which has not evolved enormously over the last 50,000 years. We are still subject to the circadian

rhythms to which our bodies respond. You cannot push the human body much beyond those limits for a very long period of time, or something fails.

I remember myself as a college student working in the iron ore mines in Minnesota, in the midnight shift, the graveyard shift, we called it. I was stationed on what we called the rock dumps, where the trains were bringing gondolas of waste rock from the mines. I was at a switch where we had to direct the trains into one of three dumps. And at 2:00 or 3:00 in the morning, even as a 20 year old with a lot of energy, a lot of vigor, I finally resorted to marking down on sheets which dump I had which train on.

And then I wasn't sure. It just scared the liver out of me that I might send a train up and rear-end somebody and kill a person. I never did. Those periods, however, of switching trains were interrupted by the responsibility then to, in a rain storm, take a 90 pound jack on your shoulder and go up to the end of the track and jack up a track that had slipped away and put rock under it to support it. That kept you awake for the next few hours.

But what we have seen in failure after failure is, in all the modes of transportation, is the fatigue. Vince Lombardi said it very well: fatigue makes cowards of us all. He didn't mean the cowards in failure to, the courage to stand up, makes us less able to assess, confront, anticipate, respond to, be nimble, be effective in that moment of crisis when it's needed. That is a major responsibility of FRA, and of the NTSB.

Mr. Sumwalt, in your testimony, which was well done and highlighted with very keen specifics, addressed that issue. And Mr. Chipkevich, over the years, you have been a great asset to this Committee in your work at the NTSB and we are grateful for your service, your professionalism. Mr. Scovel, I appreciated the opportunity to visit with you shortly after you assumed the position as IG. As a former Marine, you understand fatigue. You drove people to the point of breaking.

[Laughter.]

Mr. SCOVEL. I will claim the fifth on that one, sir. I am glad my former subordinates are not here today.

Mr. OBERSTAR. But you also understand that the FRA has to take action on these initiatives that it has set forth and to conduct vigorously its responsibility of oversight of the industry.

Mr. SCOVEL. Indeed it should, sir. We have identified a couple of areas in our testimony where we believe the Federal Railroad Administration can target its oversight better and increase its enforcement efforts.

Mr. OBERSTAR. Ms. Siggerud, GAO has once again provided a great service to transportation in this excellent report on rail safety, much of which I have read. I still have about half of it to go through. But it is an excellent blueprint for action as we move forward on the reauthorization. I look forward to your continued participation and thank you for your testimony.

Ms. SIGGERUD. Thank you.

Mr. OBERSTAR. And you asked me, we did very well, I must say, colleagues, in the Appropriations Committee consideration of the continuing resolution. We have the $39 billion funding that equals the authorization level for highway and transit accounts in

SAFETEA-LU, $35 billion in the highway account and $4.3 billion something in the transit account. So the solidarity of the members, Democrats and Republicans on this Committee, I think had its effect with the Appropriations Committee. Now when that bill comes to the House floor tomorrow, we all have to get up and vote for it. We asked them to fully fund, they have, and now we have to support it.

Thank you.

Ms. BROWN. Thank you for your leadership, Mr. Chairman.

Mr. Shuster.

Mr. SHUSTER. Thank you very much.

Mr. Scovel, you said that at the centerpiece of rail safety is grade crossings. I wondered, it seems to me to be extremely difficult because of the people doing dumb things, trying to outrun trains, in some cases you may have the town that is responsible for some of the signage that doesn't put signs back up and don't participate.

You laid out five points, I think it was five points, on what we need to do. You talk about other things that we can do today, because it is impossible to put a bridge over a tunnel under everywhere a railroad crossing is. It is just a fact of life. I know we have had education problems out there. So if I could get you to comment on what we can specifically do to improve and diminish fatalities and accidents at railroad crossings.

Mr. SCOVEL. Yes, sir. If I may elaborate on the five points that I outlined in my oral statement, there are approximately 3,000 grade crossing accidents a year, one fatality and three injuries every day. Those numbers are down since 1995, but they are up during recent years 2003 through 2005.

With better enforcement of Federal reporting requirements, we believe that FRA will be able to better identify dangerous grade crossings and target its enforcement efforts, its remedial efforts, and use SAFETEA-LU funding to improve conditions on those. I think you are absolutely right, Mr. Shuster, when you say that there are certainly people who will do dumb things, to use your term. Knowing human nature, we cannot prevent that.

However, there are far too many people who have been caught at grade crossings that haven't been sufficiently marked or where vegetation has overgrown the roadway approach to the crossing. And because the sight distances have not been maintained, a train caught them unaware. And these are truly innocent people.

So we have two broad categories. One, certainly people that we regret losing, but the second category, most certainly people who are truly innocent victims in their loss.

Reporting requirements. There are two categories of reporting requirements. One concerns serious collisions and I mentioned those earlier. Those must be reported to the NRC within 2 hours. In November 2005, we reported that 21 percent of serious cases were not reported at all. It is disturbing to think that probably those serious cases were reported to railroad company authorities, to the operations center, to a dispatch center, to corporate headquarters, to a general counsel, to the company's insurance company. Yet, the Federal agency responsible for determining whether a Federal investigation should be conducted after a grade crossing collision was not informed. And that is in one case out of five.

Our recommendation in 2004 to the FRA, which they adopted and have shown good progress in meeting, is that they reconcile cases reported to the National Response Center with cases submitted monthly to their own database. And further that they assess and collect civil penalties for the railroads' reporting failures. As I mentioned, they are making good progress on that. Our latest numbers through 2006 show that there have been only 12 serious cases that were not reported on time to the National Response Center.

The second reporting requirement concerns all grade crossing collisions. Those must be reported within 30 days of the end of the month in which the accident occurred. This is important, not only to identify dangerous crossings, but also for state departments of transportation to determine how they should spend Federal money on grade crossing improvements.

Our recommendation is that the Federal Railroad Administration conduct periodic reviews of records maintained by the railroads to ensure that grade crossing collisions are reported on time. By comparing railroad records with those in its own database, there may be some discrepancy that may serve as a basis for the assessment and collection of civil penalties on down the line.

Sight obstructions is probably an area that we believe would yield immediate results. There are over 237,900 grade crossings, public and private, in this Country; 76,000 public grade crossings are not protected by automatic warnings devices. From 2001 through 2005, 688 grade crossing collision reports of 15,406 were identified as involving some kind of sight obstruction. It might have been standing railroad equipment, it could have been vegetation overgrowth, what have you.

Twenty-three States currently have laws governing sight distances at crossings, but 27 do not. I invite the Committee to look at my written statement, which was submitted for the record. Page 7 contains a gripping photograph of a grade crossing in Illinois that illustrates the before and after results of proper maintenance of sight distance at a grade crossing.

Mr. SHUSTER. I wondered if I could ask Mr. Sumwalt and Mr. Boardman, do we have any numbers on many different reasons, whether it is sight obstructions or whether technological, whether there needs to be technology there, or people doing dumb things, do we know what the percentage is of people trying to beat that train versus people that are crossing because they can't see the train coming? Do we know what those percentages are? I think those are key numbers to be able to determine what we need to aggressively pursue.

Mr. BOARDMAN. I think we know some of the numbers, Congressman. We have had since 2004 a grade crossing action plan that is getting results. When we look at, I just pulled statistics for 2001 and 2005, just on grade crossings themselves, the fatalities in 2001 were 421 and we are down to 357. I recognize that they go up and down a little bit. It is, I think particularly frustrating to the FRA and to the industry that we don't seem to be able to push it lower. We have come down a long way since the 1970s and the 1980s. But we are getting down to a level now that it is much more difficult.

The action plan looked at a lot of different kinds of things, including studying using video crossing cameras. One in Pittsford,

New York on the CSX line itself, that we had a report in August of 2006 that was submitted on that and what we could do to improve and use that to cut down the number of crossing accidents.

On the 15th of February, I will be up in New York finalizing a series of public workshops that we have had on private rail crossings to look at what we could do with about 94,000 private rail crossings that are not eligible for things like the Section 130 program to improve crossings. Because our true belief is, every single crossing, 250,000 plus or minus crossings, needs treatment of some sort. It could be four quadrant gates, or channelization. It could be just wider pavement or markings or crossbucks or whatever it is for that particular crossing based on the risk, to reduce the number of incidents, collisions and accidents.

That is part of our partnership that was mentioned earlier with Louisiana. Texas is looking at that. We have a sealed corridor in North Carolina that we have particularly good experience with, and we are working with California now on that same kind of sealed corridor there as well.

Mr. SHUSTER. But there is no data on the, what did you say, 450 fatalities at grade crossings last year? Is that the right number?

Mr. BOARDMAN. We can look at that specifically and get back to you with how we do break out what the reasons are.

[The information received follows:]

Inserts for the Record
Testimony of Joseph H. Boardman, Administrator,
U.S. Department of Transportation,
before the
Subcommittee on Railroads, Pipelines, and Hazardous Materials,
Committee on Transportation and Infrastructure,
U.S. House of Representatives,
January 30, 2007

INSERT #1

There were 2,897 accidents at highway-rail grade crossings in 2006 with 362 fatalities. These totals include pedestrians. Approximately half the collisions and casualties at highway-rail grade crossings occur at crossings with active warning systems (e.g., flashing lights, flashing lights with gates), and the other half occur at crossings with passive signs (e.g., crossbucks, stop or yield signs).

The vast majority of accidents at actively-signed crossings involve the violation of warnings provided, and a small minority result from other factors. Most accidents at passively-signed crossings also involve road user behavior. However, at passively-signed crossings there are significant actions that can often be taken to aid the road user in proceeding safely. Installation of active warning systems reduces risk by about 70 percent and can be very cost effective. Some crossings need to be evaluated for sight distance and proper signage so that motor vehicle operators can look for approaching trains at the decision point (which may be some distance from the tracks, or just 15 feet from the track, depending upon roadway speed and the type of sign at the crossing). In other cases, crossings cannot be made safe because of fixed sight obstructions, extreme angles of intersection, or other factors; and those crossings should be closed.

At DOT, we talk about the need for the three "Es" – engineering, education, and enforcement. We need well-engineered roads, well-educated road users, and enforcement of road signage. State Departments of Transportation and county and city engineers are responsible for making engineering determinations. FRA and the Federal Highway Administration encourage review of crossing safety on a corridor basis so that all options are considered and limited safety funds are spent wisely.

FRA has a role in promoting highway-rail grade crossing safety by such measures as (i) requiring sound inspection, maintenance, and testing of active warning systems (ongoing); (ii) requiring that freight rolling stock is reflectorized so that trains already on the crossing can be seen during periods of darkness or inclement weather (program in progress); (iii) maintaining and enforcing the accident/incident reporting system (ongoing); (iv) maintaining the presently voluntary National Crossing Inventory (reporting to which FRA's safety bill, transmitted February 12, 2007, would make mandatory); (v) seeking additional Federal crossing safety legislation through that bill,

such as the provision that would preempt certain tort claims in order to foster the development of new crossing safety technology and that would allow FRA to give away crossing safety souvenirs as part of our educational message; and (vi) encouraging enactment of FRA's model State law against railroad trespass and vandalism. Further, FRA has provided leadership in development of the Secretary's Action Plan for Highway-Rail Crossing Safety and Trespass Prevention (1994, 2004).

For their part, State legislatures need to enact strong sanctions for violations of crossing safety laws, and motor vehicle administrations need to ensure that the licensure process for drivers includes education regarding crossing safety. Law enforcement agencies and the judicial system need to take crossing violations seriously.

After a recent audit, the U.S. Department of Transportation's Inspector General summarized the issue as follows:

> "**Motorist behavior caused most public grade crossing accidents.** Risky driver behavior or poor judgment accounted for 31,035 or 94 percent of public grade crossing accidents and 3,556 or 87 percent of fatalities, during the 10-year period. With the exception of 22 train passengers and railroad employees, all of these fatalities were motorists. According to accident reports, motorists failed to stop at grade crossings or drove around activated automatic gates. Of the 10 states we visited, only Illinois had passed photo enforcement legislation to deter grade crossing traffic violations. Further, only 4 of the 10 states we visited—Illinois, Mississippi, Tennessee, and Texas—had imposed specific grade crossing penalties for motorists' violations. *Safety could be improved with enhanced education, legislation, and traffic enforcement to target motor vehicle drivers who violate grade crossing safety laws and warnings.*"

[Emphasis added.] Report of the Audit of the Highway-Rail Grade Crossing Safety Program, Report No. MH-2004-065, June 16, 2004.

A recent summary of responsibilities for crossing safety is included in FRA's Safety Advisory 2005-03, a copy of which has been provided for Committee files.

Mr. SHUSTER. It seems to me that if we don't know why the majority of them are happening, we are never going to be able to come to a solution. Because again, and my guess is if we have trespassers, too, the trespassing and those combined, it is overwhelmingly the reason for fatalities. If we don't find out the reason why it is happening, we are never going to solve it. Because you are never going to solve and stop people from going around a grade crossing, not paying attention. So those are things I think we have to determine.

Mr. BOARDMAN. May I respond to that?

Mr. SHUSTER. Sure.

Mr. BOARDMAN. I think you are absolutely right. In fact, in 1997, the number of trespasser fatalities went above the grade crossing fatalities for the first time and it stayed there since that period of time. We are looking now and working with our partners and trying to find a way to profile those trespassers to find out the reason or the particular profile on the trespassers themselves, to look at reasons so that we can come up with solutions for reducing that number. Many of those are in the urbanized areas, and we do have some data, which we will be happy to share with you on what the other reasons are. But we have seen, and especially with these videos now that we have right in the trains, that for whatever reason, sometimes it is inattention, sometimes it is inattention because of alcohol use, sometimes it is thinking you are going to beat the train, that people actually go around our quadrant gates and others to beat the train.

Mr. SHUSTER. My time has expired, and in my enthusiasm to ask my first question here, I wasn't paying attention to the clock. I thank you.

Ms. BROWN. Not a problem. Perhaps we will have a second round.

I want to give Mr. Braley an opportunity to ask questions, and we will come back around.

Mr. BRALEY. Thank you, Madam Chair, and thanks to the distinguished panel for taking the time to talk to us today about this important subject. Mr. Scovel, my father enlisted in the Marine Corps when he was 17, went ashore at Iwo Jima when he was 18. I think I have some sense of what your subordinates went through, since I was his subordinate growing up.

One of the questions I want to ask you about has to deal with your comment about, with better enforcement of the reporting requirements, we can improve conditions at grade crossings. One of the things that was included in Mr. Boardman's materials was a proposal to revise the schedule of civil penalties for safety violations. My concern goes to the level of penalty associated with reporting and compliance with the action plan. As an example, one of the things that I can tell you from my former life is, having a reporting requirement and an action plan requirement and having it in place is one thing.

Getting compliance from the subjects who are being required to make reports is another. One of the things we know is the Joint Commission on Accreditation of Health Care Associations has a sentinel event reporting process for medical errors that occur at hospitals. Despite the fact that the Institutes of Medicine projected

48,000 to 94,000 people die every year due to preventable medical errors, we know from their statistics that only 300 of those reports are filed on average every year.

So my question for you is, what type of penalty is associated for non-compliance with the reporting requirement that we are talking about, and is that part of the revisions to the schedule of civil penalties that are being proposed?

Mr. SCOVEL. I will defer to Mr. Boardman on some of the specifics to your question, sir. But if I may, it is my understanding that reporting of instances of failures to report may be subject to the assessment and collection of civil penalties. One of the things that we have worked with in the course of our studies has been the process by which FRA assesses its penalties, then aggregates them and then meets with each of the affected railroads to discuss settlement of those penalties.

It is not clear to us, and frankly, we have not had an opportunity to delve in great detail into this area. It is not clear to us the extent to which any agreed settlement represents a complete aggregation of all assessed penalties on the table, or whether there is a penalty by penalty reduction or mitigation of the amount concerned. As I stated, we have not had a chance to examine that.

We do know that FRA has recently reemphasized its civil penalty program, both with increased amounts and with increased attention to assessing and collecting a higher percentage in each category. By way of numbers, I can say settlement percentages after negotiations with the railroads have increased from 55 percent to 64 percent between Fiscal Year 2002 through FY2006.

We are cheered by that approach, most certainly. I would defer to Mr. Boardman for other specifics that may be more helpful to your question.

Mr. BRALEY. Mr. Boardman, would you care to comment, please?

Mr. BOARDMAN. Because of the type of information you need, I would like to be able to respond in writing to you on what we have done to reenergize that.

Mr. BRALEY. Is that part of your written proposal dealing with revisions to the schedule of civil penalties, or is that related solely to safety violations?

Mr. BOARDMAN. Do you mean in terms of the proposal that we are considering that is in clearance?

Mr. BRALEY. Yes.

Mr. BOARDMAN. We are looking at that particular area. I don't have it and can't talk about this minute what might be in there.

Mr. BRALEY. Would it be possible to follow up and provide further information?

Mr. BOARDMAN. Yes.

[The information received follows:]

INSERT #2

As you noted, and as explained in my prepared testimony, FRA has proposed revising the 25 schedules of civil penalties issued as appendixes to FRA's safety regulations. The proposed revisions are intended to reflect more accurately the safety risks associated with violations of the rail safety laws and regulations, as well as to make sure that the civil penalty amounts are consistent across all safety regulations. In recent years, the minimum and maximum civil penalty amounts that may be assessed for all rail safety violations have been adjusted, but the guideline penalty amounts for specific rail safety violations have not. FRA therefore decided to reevaluate the penalty amounts in the schedules using a severity scale with particular consideration to the likelihood that an accident or incident would result from, and/or be aggravated by, a failure to comply with a specific regulatory provision.

While the Secretary's Action Plan for Highway-Rail Crossing Safety and Trespass Prevention is not, in itself, a safety regulation that may be directly enforced through the imposition of civil penalties, the Action Plan describes measures to promote highway-rail grade crossing safety, including enforcement. In this regard, the proposed revisions to FRA's civil penalty schedules would significantly increase the guideline penalties for the failure to file a monthly report of accidents/incidents, including grade crossing accidents/incidents, in violation of 49 C.F.R. Part 225. The guideline penalty amounts would be increased to $6,500 for non-willful violations, and $9,000 for willful violations, from the current guideline amounts of $2,500 and $5,000, respectively. The guideline penalty amounts would also be increased for the failure to immediately report by telephone certain accidents/incidents and other events, including a fatality at a highway-rail grade crossing resulting from a train accident/incident. The amounts would be increased to $1,500 for non-willful violations, and $2,500 for willful violations, from the current guideline amounts of $1,000 and $2,000, respectively.

Moreover, the guideline civil penalty amounts would be increased for violations of the substantive regulations directly concerning the safety of grade crossings. For instance, penalties would be increased for violations of FRA's Grade Crossing Signal System Safety regulation (49 C.F.R. Part 234), which imposes minimum maintenance, inspection, and testing standards for grade crossing warning systems. This regulation also prescribes standards for the reporting of failures of such systems and prescribes minimum actions railroads must take when such warning systems malfunction.

It should be noted that FRA's penalty schedules are meant to provide guidance as to FRA's policy in predictable situations—not to bind FRA from using the full range of our penalty authority where circumstances warrant. Thus, regardless of the amounts shown in the schedules, FRA continues to reserve the right to assess an amount other than that listed in the schedules based on the circumstances of the alleged violation. This includes assessing a civil penalty up to the statutorily authorized maximum of $27,000 per violation where a grossly negligent violation or a pattern of repeated violations has created an imminent hazard of death or injury to persons, or has caused death or injury.

Mr. BRALEY. I would appreciate that.

One of the other things that you mentioned was that the 2004 grade crossing action plan was getting results, and I assume that it was impacting the number of fatalities and other injuries resulting from violations at grade crossings. Is there anything else that the Department is considering that would deal with new innovations in warning systems that are being used at grade crossings as part of this overall safety plan?

Mr. BOARDMAN. Well, the agency has been involved with the intelligent transportation system technology folks all the way along and looking at how in the future the technology that is going to be actually placed in the automobile may provide additional mitigation of or warning, I should say, crossing the railroad.

We are certainly looking at every technological improvement to do that, including using solar power to light some of the crossing signs we have used. One of the things that we have done in this process, I always murder the term, is better conspicuity of the trains themselves by placing tape that you can see on the train. I was surprised when I came here how many of these collisions occur by somebody driving into the side of a train, especially on a darker crossing. So yes, we are working on those.

Mr. BRALEY. Thank you.

Ms. BROWN. Mr. LaTourette. And let me just say that it was such a pleasure serving with you and working with you as your Ranking Member. I am so glad that you are on my Subcommittee. I am also looking forward to working with you. You exemplify what is important about working together in bipartisanship on this Committee. Thank you very much.

Mr. LATOURETTE. I thank the Chairwoman very much. I want to join the mutual appreciation society, I was not here at the beginning of the hearing to congratulate you, but I certainly want to congratulate you on assuming the chairmanship of this Committee. I have enjoyed our relationship over the course of the last Congress. I felt that we were able to get a lot of things done and it was in large part because of you and your staff. So I congratulate you.

I also want to congratulate my friend, Mr. Shuster, for being the lead Republican on the Committee. As you all know, I have been promoted to the Coast Guard Committee, of course. But I am looking forward to working with Mr. Shuster as well.

Mr. Boardman, welcome to you. It is good to see you again. Let me just ask you, where are we with the whistle ban rule?

[Laughter.]

Mr. BOARDMAN. Thank you so much for that question.

Mr. LATOURETTE. You are welcome.

Mr. BOARDMAN. We have finalized. The final rule was in April of 2005. We had clarifying amendments for that that were completed in August of 2006. As of January 18th, we have 259 quiet zones, and we have approximately 40 communities that are now in the establishment process.

We looked at the results actually for the train horn rule. We have had 66 accidents after the zones were established, 24 in 2005 and another 42 in 2006, and 2 fatalities and 19 injuries among those accidents. And when we compare the data to the crossing

data from 2000 to 2004, it doesn't suggest that the quiet zones are having an adverse effect.

Mr. LATOURETTE. Thank you very much for that update.

Mr. Scovel, I want to talk about a couple of your recommendations. One is my view, and my view only, that if there is a requirement that people report accidents, they should report accidents. If they don't report accidents, there should be a penalty. But putting that aside, I don't want the record to have an implication, because you use the word railroad supplied information. Is there anything in your analysis or research that indicates that the information is being supplied by the railroads when they report is somehow bad information?

Mr. SCOVEL. Thank you, and I would like to take this opportunity to clarify that. To my knowledge, our research has not indicated intentional false information supplied by the railroads. This responds as well to one of your questions, Mr. Shuster, specifically concerning causes. Because I think this addresses both of your concerns.

In the reporting requirement to the FRA database for all grade crossing collisions, there is no requirement that the cause of a collision be identified in the report submitted to the FRA. So whether it was a trespasser, for instance, or an innocent motorist caught on the track by an approaching train, it is not always immediately apparent from the report submitted to the FRA. That may be included, but it is not required to be. And that was the basis for one of our recommendations as well, that FRA increase its involvement in the investigation of grade crossing collisions by screening not only the information contained in its own database, but also going back to the railroad's own records, to see what those records may indicate, by reviewing data contained on the locomotive event recorder, if that is available. And also by checking with local or state law enforcement authorities, who may have had an opportunity to respond to the scene of an accident, and they may have been able to document the cause as well.

I don't mean to say that the railroads, at least according to our research, have intentionally mislead any Federal authority. Our concern is with the timeliness of that reporting and then FRA's ability to follow up and conduct whatever investigation its admittedly limited resources may permit.

Mr. LATOURETTE. And we are on the same page on that, and I think I said that. If there is a rule that the railroad should report something, they should report it. But I just wanted to be clear, it seems to me if they report a fatality at a grade crossing, there is an ability for the FRA to go get the police report from the town. And that brings me to, before I let Administrator Boardman hop in, that leads me to your observation that there was some, prior to the Graniteville crash, there was some information available dealing with switches.

I guess my question is, what do you think the FRA could have done in that my understanding of Graniteville was that some people were in a hurry and left the yard and didn't put the switch back. I don't know what the FRA could do to, I assume people know that you are supposed to put the switch back. So I don't know that any amount of education is going to solve that problem.

So maybe you could clarify what you were talking about with the switch in Graniteville.

Mr. SCOVEL. Sure. My understanding of the circumstances of that accident is that a train proceeded down the track, it was time for a rest period, using a switch, the personnel on that train put their train onto a siding but didn't walk back to properly align the switch to the rear. A train with hazardous material aboard proceeded down the same track, and because of the improperly lined switch, collided with the train that was off on the siding.

Mr. LATOURETTE. Right.

Mr. SCOVEL. Our understanding is that FRA had been tracking switch errors for some years before the 2005 Graniteville accident. Our review of that data shows that from 1997 through 2005, the number and rate of accidents caused by switch errors steadily increased. There was a large jump in 2003. Had FRA's safety office at the time been properly attuned to using predictive factors as the basis for alerts on safety issues, it might have been able, and again there is no guarantee, we certainly acknowledge that, but it might have been able to put the word out sooner about the dangers and the increased number of improperly lined switches.

Mr. LATOURETTE. I get that, and I think maybe on this point we can disagree without being disagreeable. I think that most folks that work on the railroad know that you have to align the switch when another train is coming.

Administrator Boardman, did you want to jump in on my other one and then I will be happy to be finished?

Mr. BOARDMAN. Sure. A couple of things, just to clarify, and I think actually, Mr. Scovel did clarify. The reports that weren't reported on the grade crossings really had to do with telephonically reporting them. There was a failure to telephonically report them, but they were actually reported in writing. So that was the disconnect there. Part of that may be because we broadened the requirements back in 2003, where it used to be you had to have five or more fatalities before you had to call in, and then that changed. So I think he has recognized that in the report. I just was clarifying that.

In terms of the trend analysis, that is certainly something we would like to be able to do, to identify and predict these kinds of accidents beforehand, and we are addressing it in our human factors NPRM that was issued October 12th on the three cardinal operating practices. But when you really look at it, and I am just looking here at the improperly aligned switches, most of them occurred in yards. This was a mainline switch. There was this big increase from 2002 to 2003. But there was also a reduction again in 2004, and still it was in these yards rather than on the main line.

So we understand the concept, the idea. I think putting it in practice is somewhat difficult with the data that we had.

Mr. LATOURETTE. Sure. I thank all the witnesses. I thank the Chairwoman.

Ms. BROWN. Just for the benefit of the audience and the witnesses, and also the members, we are going to come back. We are going to have a second round. We are going to adjourn now until 4:00 o'clock, so we can go and vote and come back. I haven't had an opportunity to ask my questions.

Thank you so much. We stand adjourned.

[Recess.]

Ms. BROWN. The Committee is officially back in order.

Ms. Napolitano, you can have your five minutes of questioning.

Ms. NAPOLITANO. Thank you, Madam Chairwoman. I would like to have permission to submit other questions, because I know I am not going to have enough time to proceed in all the lines of questioning that I would love to pursue.

Ms. BROWN. Without objection.

Ms. NAPOLITANO. Thank you, ma'am.

To Mr. Sumwalt, you talk about railroad fatigue, the employee fatigue. My concern is also with the rail fatigue and the infrastructure fatigue. Identifying the areas how the railroad is addressing the life of a rail, because it does have a life, at least in the hearings that we have had in California over the derailments, I have been given several figures on the supposed life of a rail. My concern, especially in our area in California, is because of the proposed increase of the Alameda Corridor East traffic ten-fold or so in the next 15 years or so, that the increase in fatigue of the rail, the number of rail cars, the increase in the trains, they estimate one every ten minutes, one every six minutes, depending on who you talk to, is how do we identify that the railroads are upgrading the infrastructure to be able to safely handle the increase in the traffic, the increase in the load of the trains themselves, the amount of trains? And of course, that goes along with all the other questions about the rail crossings, about the insulated joint bars or the signalization, all of that. And how do we protect, how can we then look at that along with the employee fatigue?

Mr. SUMWALT. It's a great question, Congresswoman. Would you mind if I let Bob Chipkevich answer that question?

Ms. NAPOLITANO. Not at all.

Mr. SUMWALT. Thank you.

Mr. CHIPKEVICH. As you noted, there are many factors that affect the life of a rail. The gross tonnage, the number of trains operating over the condition of the ties and ballast, the supporting structure, that all affect how the rail is going to wear. Certainly what is important is to have a very good inspection program that is very disciplined, and a testing program, so that you can find defects before they grow to a critical size and fail and get that defect out of that rail and out of that line before you have a train accident.

So the key really is to have a good, solid inspection program, a good testing program, one that can identify defects before they get to a particular size that is critical.

Ms. NAPOLITANO. After the several derailments in my area, as I have stated before, they have increased the testing, they have increased the inspection over the area, so we have not luckily had any other episodes. But who is in charge of the inspection and how often should it be done? I know you have specifics, and that should be a question that I don't need answered now, but I certainly would like to have it in writing, for this Committee to be able to understand the other factors that could cause accidents, besides the employee fatigue that we are talking about.

In my area, after 9/11, there was a golden handshake with many of the railroad employees, they did not pick up new employees as

easily. And when we had the increase in the ACE corridor, the Alameda Corridor East, they were talking about unmanned cars. We had a runaway train, I don't know if you remember or were aware of that one. It ended up in the Seals District. Thankfully nobody was killed. But it was not only an inconvenience, but it cost a lot of money, several million dollars worth of problems.

And then of course there was talking about putting on unmanned cars, which I think is totally unacceptable. Because there is no determination of what they are going to encounter along the rail lines to be able to deal with and have an individual make a decision rather than somebody at a switch line somewhere trying to put those cars forth.

You were talking about placing the hazardous material in the back and decreasing speed. We were informed by the rail folks that they end up putting speed as they go outside of the general area, coming out of the rail yards. They go through certain areas and of course, they do interfere with traffic, as I said, all the grade crossings we have. But they also have a habit of pulling on their switch, on their horn at all times, and that is of course not acceptable in urban areas, because there are people sleeping at 2:00, 3:00 in the morning. And that has been another area of concern with the local individual cities.

With that said, like I said, I have a whole bunch of questions and I have to go to another committee, but how do we allow the States to be able to garner information from the cities or the police departments for information on accidents that are not reported otherwise? And how do we force the railroads to identify all accidents, not just those that qualify to be reported by them, given their criteria? That to me is something that we certainly want to assure the American public that we are looking at everything that affects them, not just what the railroad folks deem is acceptable as a reportable item.

And I think my time has run out, Madam Chair, but I would certainly like to include several other questions in my committee reports, because I do have a lot of them, that deal with working with the States, working with the State public utilities. The statement that was submitted for the record from Steve Larson, the Executive Director, California PUC, it states that California needs and desires more direct accountability for railroad safety. I am sure you have copies of it, so that you can see his conclusions. Hopefully you will be able to address them to this Committee some time in the future.

Thank you, Madam Chair.

Ms. BROWN. Thank you.

Mr. BOARDMAN. Madam Chairwoman, can I just respond to part of that, at least, if it's all right with the Congresswoman?

Ms. BROWN. Yes.

Mr. BOARDMAN. In particular, because of the partnership that we had with the California Public Utilities Commission, after the Pico Rivera accident, and in particular, the team that got put together really included the Public Utilities Commission on that particular accident. And that was one of the joint bar accidents that you identified, Congresswoman. In fact, what happened, immediately afterwards, after we did the inspection, the Commission also joined us

in our RSAC group, which is the Railroad Safety Advisory Committee, and was actively involved in the consensus to get to a final rule that really required on-foot inspections of these joint bars. The final rule was actually published just this last October. So we do have very effective and full cooperation with the Public Utilities Commission.

We are looking not just at this level of on-foot inspection, we also demonstrated, back in 2005, and then enhanced photo imaging to detect the cracks on high rail vehicles with the railroads again, in 2006, with GPS being added. Now we are enhancing it again to make it simpler, lighter, and less expensive in 2007.

We are deploying, somebody said earlier, what we call the T18 vehicle. We will actually have five track geometry vehicles that the FRA owns that will be out looking at 100,000 miles of track a year. And we are seeing from 2001 to 2006 a reduction both in the percentage of the number of accidents that occur because of track defects, and the actual numbers of them as well.

So I just wanted to let you know that we are staying on top of it. Your California Public Utilities Commission is working with us on it, and we appreciate that.

Ms. NAPOLITANO. Mr. Boardman, I was the one who called PUC and got them involved.

Mr. BOARDMAN. Yes, ma'am. And we kept them involved.

Ms. NAPOLITANO. Well, hopefully we will continue to, because they have better information than anybody else, so far as some of the rail accidents that happen in California. The research and development, I still have not gotten a report on the piece of joint bar that was sent for inspection to Washington from that accident. And there was supposed to be a follow-up as to the R&D that was going to be submitted to a university for research of how to address, how to identify it, how to see through the joint bar. Because apparently there is certain technology that is not totally able to see those hairline cracks inside the joint bar.

Mr. BOARDMAN. Congresswoman and Madam Chairwoman, if it pleases you, I will have my staff contact you and make sure you have that information.

Ms. NAPOLITANO. I would appreciate it, with a copy to the Chairwoman, because they were involved with us at that time.

Mr. BOARDMAN. Yes, ma'am.

Ms. NAPOLITANO. Thank you.

[Information received follows:]

INSERT #3

The National Transportation Safety Board (NTSB) took custody of the joint bars involved in the October 16, 2004 Pico Rivera accident for examination in its metallurgy lab. An examination of the bars occurred on November 4, 2004, and a report was completed on March 4, 2005. The NTSB can provide the specific recommendations from the report, but the report states that the north bar broke from a pre-existing fatigue crack

in the bottom gage corner of the bar, which led to the joint failure at the rail ends. The joint had also exhibited signs of distress, such as rail end batter and delaminating of the insulating material, and the south bar had an additional pre-existing crack (though not at the rail ends).

This accident was a principal reason for FRA's issuance of an interim final rule published on November 2, 2005, and a final rule published on October 11, 2006, both addressing the inspection of joints in continuous welded rail (CWR) to promote joint integrity and detect cracks in joint bars. The final rule was unanimously supported by FRA's Railroad Safety Advisory Committee (RSAC), and key staff from the NTSB and the California Public Utilities Commission participated in its development. The final rule establishes a schedule for inspecting joints in CWR that takes into consideration track class (operating speed of trains over the track), gross tonnage over the line, and passenger service.

The final rule mandates periodic, on-foot visual inspections of joints in CWR. Nondestructive testing, using ultrasonic probes, has been used to evaluate joint bars, but there is presently no evidence that the process reliably detects cracks better than visual observation. There are technologies available to inspect for internal material flaws and external hairline cracks for steel. These include magnetic-particle; visual, enhanced with fluorescent penetrants; ultrasonic; and electro-magnetic acoustic. To utilize these techniques the joint bar must be removed from the track and subjected to the inspection process. Attempts have been made to conduct ultrasonic inspection with the joint bar in place, with very limited success. Therefore, FRA has developed a vehicle-borne, optically-based joint bar inspection system that utilizes high-resolution cameras to obtain an image of the joint bar. Automated detection algorithms highlight cracks, and railroad personnel review the image to determine the validity of a crack. Two North American railroads have recently acquired the technology for installation on their inspection cars. This approach inspects the visible area of a joint bar as installed—approximately 45 percent of the joint bar surface area—for hairline cracks, and can inspect joint bars at a speed of 50 miles per hour.

The final rule also requires that railroads submit fracture reports for all cracked or broken joint bars found in CWR during required inspections. This data, along with FRA inspection data, will be reviewed by FRA and the RSAC to chart future actions.

Ms. BROWN. Thank you.

And any questions that you have, just submit them for the record and we will follow up.

Mr. Boardman, what is the FRA doing to prevent human factor accidents that are not related to fatigue?

Mr. BOARDMAN. Human factor accidents, and I know that fatigue, we're going to have a hearing on. So I do appreciate the fact that you identified that. We know at this point in time what the top causes of human factor accidents are. Some of them have been pointed out today and certainly, leaving the switch aligned incorrectly is one of the number one causes. Another one is leaving cars out to foul the main track. And the third one really is shoving a cut of cars into an area that doesn't have enough space for those cars.

And those really are the cardinal operating rules for each of the railroads in human factor accidents. On October 12th, we published a NPRM to make those rules become Federal rules. That is working itself forward. We would expect by the end of this year, late in the year, we will have a final rule on that.

We also have kicked off and will have a ceremony, I think, next month at UP on the close call reporting system. And we have other railroads that are also interested in that. That is just an ability to look at and find something that should have been an accident that wasn't an accident by having it reported by the employee and then protecting that information for the employee so we can find out what is happening. It has been very successful in the FAA.

A third area that I think we have had good success with thus far, is working with BNSF out from Avard, Oklahoma to Oklahoma City, I think. I can't remember right this minute. We have a switchpoint monitoring program on dark territory track, which is one of the areas that is of particular concern to us, and is part of one of the major accidents that we had in January of 2005.

Ms. BROWN. I understand that the FRA is working on a project with Union Pacific and Dow Chemical to come up with the new tank car standards. Can you give us an update on that?

Mr. BOARDMAN. Yes, ma'am. Since the Minot disaster back on January 18th, 2002, FRA has had a plan to look at and work on the steel that is in tank cars, and has accelerated, because of safety and the interest of the Congress, the kinds of research that it would take with the Volpe Center in Massachusetts to get not only an idea of what we need to do with the steel, but also to get a baseline for performance of the current fleet of TIH vehicles and the historical accident data this year.

We expected that we would get all that data and then what we would do is begin to build a new rule. But we pushed that forward in cooperation with this memo of agreement that we announced just December 6th for a next generation tank car that is being worked on by Union Pacific, Dow Chemical and Union Tank Car as well. That case will be using the Transportation Technology Center to test the tank cars and verify the baseline work that Volpe is doing.

Our expectation is that together with PHMSA, we have had a couple meetings with the industry, we are going to have a couple

more, and we are going to be able to enhance the performance standards for these tank cars and get a rule out on that by 2008.

Ms. BROWN. Thank you.

Mr. Sumwalt, what can the FRA do right now to make transportation of hazardous materials safer?

Mr. SUMWALT. Well, as the Administrator mentioned, there is great promise for the future. But as he mentioned, it will be at least 2008 before the rule is completed. Then it will take many, many years for the industry to equip all the tank cars with those newer cars. So the NTSB has recommended that in the interim, until these new tank cars can come in the fleet, there are operational measures that the industry could undertake.

And we have suggested things such as looking at the tank car placement--by restricting tank car placement and by the way, we are only talking about gases, or carrying gases that are poisonous by inhalation. Not everything that goes into a tank car is necessarily catastrophic if the tank car breaks. We are talking about these cars that, if there is a rupture of the tank car, there is not much time for the people in that area to get out safely.

So when we are talking about those types of gases, operational measures can give us immediate benefits. Again, tank car placement, we suggested, we recommend considering putting those tank cars toward the rear of the train. We have also recommended issues such as restricting the speeds of trains in populated areas. There are other operational measures that the FRA could look at.

Ms. BROWN. Would voice or video recorders help you in railroad accident investigations?

Mr. SUMWALT. Certainly, Madam Chairwoman, in aviation accident investigations, we have derived great benefit from voice recorders. We have recommended to the FRA--we issued a recommendation years ago on that topic--that we would like to see voice recorders in locomotive cabs. The FRA responded to us and based on their response, we have now classified that recommendation as closed, unacceptable response. As far as the video recorders, we have issued no recommendations concerning video recorders on trains.

Ms. BROWN. Okay. Mr. Shuster.

Mr. SHUSTER. Thank you.

Ms. Siggerud, some have suggested that maybe the Federal Rail Administration needs to have additional resources and personnel to investigate and inspect railroad signals and crossings. Does the GAO believe that that is something the FRA needs, and do you have any scientific evidence to back it up, that it will make improvements in those areas, if they have more personnel?

Ms. SIGGERUD. Mr. Shuster, we did not address that question directly in our recent work. But I would say, going forward, what we think, given the resources that the agency has and its limited ability to reach out and touch through inspection the many railroad operations that occur every year, we think the challenge going forward in this reauthorization is really trying to figure out how to help the FRA expand that reach.

We looked in our report at several other models for doing that in related industries, in related organizations. So what we have laid out in the report is an approach to a risk system management.

Essentially what that would involve is having the railroad industry itself identify precursors for accidents, look at the risks throughout its system, and then prioritize its resources to address the greatest safety risks.

What we would then propose is that some of the inspection force that FRA has be used specifically to focus on those safety systems themselves and whether they are making sufficient progress in implementing that concept. Our view is that FRA could get a wider view of the compliance and the level of safety within the industry using that kind of an approach.

Mr. SHUSTER. So I am not sure I understand, are you suggesting more personnel or—

Ms. SIGGERUD. No, we are not. That is also because we looked specifically at that issue.

Mr. SHUSTER. That was an issue in your studies?

Ms. SIGGERUD. Yes, exactly.

Mr. SHUSTER. Do you believe, or is there any evidence out there that more timely reporting on accidents will decrease accidents at the grade crossings? Because when I see the evidence, most of the time it is negligence on behalf of the motorist, and not necessarily the rail, or it is the local town that has not done something.

Ms. SIGGERUD. The Inspector General's work on this seems to me to be very thorough, and I am in agreement with their views on this issue.

Mr. SHUSTER. So you believe that more timely reporting on accidents would help the situation?

Ms. SIGGERUD. Yes.

Mr. SHUSTER. Mr. Scovel, you said that 21 percent, I forget the time frame you reported on, is that a trend? Is it something that has been level for the past several years? Or is that something that has just peaked or is it on decline?

Mr. SCOVEL. Yes, sir, that figure is derived from research we conducted for the period May 2003 through December 2004. We reported that number in November 2005. And specifically it was that 21 percent of serious collisions had not been reported at all. Based on that finding, we recommended in 2004 that FRA reconcile the collisions in their own database with those in the NRC database. They have undertaken to do that, and as I mentioned before the break, during the first 10 months of 2006, our numbers show that they have reconciled 2,308 reportable collisions and found 12 collisions at that time that had not been reported. This is during the first 10 months.

Mr. SHUSTER. So it has gotten significantly better?

Mr. SCOVEL. It has, and we give full credit to the FRA for emphasizing those reporting requirements.

Mr. SHUSTER. Did the FRA, did you do anything different in that regard, put a little more pressure on them, change rules, anything that would be obvious?

Mr. BOARDMAN. I think we paid attention to what we were told and recommended, and developed a strategy for actually making that comparison.

Mr. SHUSTER. Right. That is a significant improvement.

Mr. Sumwalt, recently there was a serious accident in Massachusetts, I believe probably just a couple weeks ago, where a couple

folks from a maintenance crew were killed, two or three. Do you believe that operating rules, changing the operating rules is a more effective way, maybe we could have avoided that, or are there technological solutions that you believe could be employed that would be maybe a better way to move forward?

Mr. SUMWALT. Thank you. Our investigation is ongoing Congressman, and we will be issuing a report on that as soon as we have all the facts.

Mr. SHUSTER. I will be interested to hear about that in the future. In general, though, could you comment on technological solutions? I think you talked a little bit about it in some of your testimony about using positive train control.

Mr. SUMWALT. Absolutely. The Safety Board has had positive train control on our most wanted list since 1990. And it does offer a lot of promise. We are glad to see the industry beginning to move forward. And there is a lot of promise.

Mr. SHUSTER. Where does the FRA stand on that? I believe I read you had not come out with findings, final findings?

Mr. BOARDMAN. Positive train control is something that we have worked with Illinois on, with Norfolk Southern, and with BNSF. And we recently approved a product safety plan with BNSF so they could implement that on their service. That was done just in the last few months, in fact, last month.

The other thing that we are looking at on technology for train handling are ECP brakes, which are electronically controlled pneumatic brakes. We recently, just this fall, issued a report that generated additional interest again back in the railroads. It was an initiative that actually the railroads, the AAR, really put out several years ago. What it really does is have an electrical line going down along the train, along with the air line, and control the air on the brakes electronically, which gives the engineer much better control of the train itself. We think that will substantially improve safety of train handling, and especially think it is good in unit trains, whether they be coal trains or intermodal trains.

So we are making progress in those technological areas as well.

Mr. SHUSTER. Thank you very much.

Ms. BROWN. As we pass the reauthorization, revision or reform, what is it, and this is open to any one there, what are the most important areas for this Subcommittee to focus on regrading FRA safety activities?

Ms. SIGGERUD. Chairwoman Brown, I think I will just expand on my remarks to Mr. Shuster. We think it is very important for the FRA, given what we have seen as a fairly static safety trend, and accident rates, to do a couple of things. One is to extend the reach of the inspection force it does have, by looking specifically at the safety management systems and the safety culture of these railroad organizations.

This will not be an easy change. When it was adopted within the Office of Pipeline Safety within the Department of Transportation, this was something that required a pilot project and implementation over a number of years. Most participants view it as effective in our recent work looking at that.

There is a pilot project that has been proposed in this area that I am sure Mr. Boardman can or will say more about. However, it

is a pilot project, and it is voluntary. So it will take some time before we see results.

We also think it is very important, given the static trend that I mentioned, for the Committee and the Railroad Administration to work together to understand really what are the effects of these various new initiatives. We think the inspection plan looks good. We think the new human factor regulation has a lot of promise. They both are really in the very beginning of implementation. So we need to understand what effect they really will have.

Many of the other initiatives are voluntary and will take a fair amount of participation by the railroads to have an effect.

Mr. SCOVEL. Chairwoman Brown, if I may address your question?

Ms. BROWN. Please.

Mr. SCOVEL. We would break it into two parts, if I may, first addressing the general topic of rail safety. We would ask the subcommittee to urge FRA to aggressively implement its National Rail Safety Action Plan. A component of that is the National Inspection Plan, which we see as holding great promise. We have it on our watch list, if you will. We intend to give it time, give FRA time to fully implement it. I will note that it has been less than a year since it was first instituted. So it is really not ripe yet for our review. But we intend to do that.

Another area in the general topic of rail safety would be the items discussed by Mr. Sumwalt specifically, some of the technological and human factors issues that certainly merit this Subcommittee's attention.

With regard to the specific topic of grade crossing safety, we continue to be concerned with reporting requirements and the timeliness of those. While those, with regard to the most serious collisions, while those do not hold the promise necessarily of identifying causes, immediately by the report, they do permit the FRA and in some cases even the NTSB to decide whether a Federal investigation is warranted. Those investigations of course would be able to identify the cause. And timeliness of that initial report from the scene gives the Federal agencies time to make the call.

The other area that we would urge the Subcommittee to work with FRA on is model legislation, if you will, to assist the states in developing standards for sight obstructions at highway-rail grade crossings. As I hope we made clear in our testimony, that will be key for many grade crossings where there are not active warning devices in place.

Thank you.

Mr. SUMWALT. Madam Chairman, thank you. I would like to weigh in on that. For at least a decade, the NTSB has issued recommendations to the FRA regarding the need to establish scientifically based principles for fatigue management. Fatigue is a big issue with railroads and all modes of transportation.

But in the case of the FRA, they have replied that they do not have the statutory authority to enact the changes, due to the stipulation in the Hours of Service Act. So we have a situation where we are making recommendations to an agency, yet that agency does not have the authority to enact the changes that we would

like to see, due to stipulations of the Hours of Service Act. That would be one area that we feel could greatly assist.

Mr. BOARDMAN. Madam Chairwoman, we hope to have a bill through clearance and be able to talk about it a little more. I think there are three things I would say. One is that we believe that the pilot program that was talked about a few minutes ago on risk is a particularly important one, if what we can do through that is to ingrain an even greater level of safety culture in a railroad and in a specific location.

We know today that we have to change the way that we hold railroads accountable. They have to change the way that they do their jobs today as we all have had to, as we have learned new science, as it is being talked about. So the second thing is that we want the opportunity to be able to apply that new science--that new understanding of what it takes to make sure that human factor issues and risks are reduced.

Then lastly, we believe that it is also extremely important for us to have the right baseline data for grade crossings in this Country on an inventory basis. We have difficulty with some of the information that we get now that is not necessarily required. Thank you.

Ms. BROWN. My last question. The old teacher in me, if we were going to grade the FRA, what grade would we give it?

Mr. BOARDMAN. Shall I go first?

Ms. BROWN. Yes, you can.

[Laughter.]

Ms. BROWN. A professor once told me, if you are going to get an A, what are you going to learn? Yes, sir.

Mr. SUMWALT. You would like for me to answer that?

Ms. BROWN. Yes, sir. I would like everybody to answer that.

Mr. SUMWALT. Oh, great.

Ms. BROWN. So we get a feel as to where we are and where we need to go.

Mr. SUMWALT. Well, I look at numbers. We have over the lifetime of the NTSB and the lifetime of the FRA, issued to them 534 safety recommendations. Overall, the FRA has implemented 76 1/2 percent of those recommendations.

Now, to put that in perspective, Madam Chairwoman, if we look at all of the other DOT modal agencies and we look at that as a composite, including the FRA, on average, the DOT modal agencies have implemented almost 82 percent of our recommendations. So with that respect, they are below the average of the other DOT modal agencies.

But in certain areas, the FRA is doing very well. The Administrator mentioned that in October they issued a final rule on joint bar inspection. We think they did a nice job with that final rule. We also know that joint bar difficulties led to the accident at Minot, the accident at Pico Rivera. So we applaud their efforts for coming out with that final rule.

On the other hand, the Minot accident, we found that the FRA's oversight of the railroad's continuous welded rail program was ineffective, because the agency neither had reviewed the program nor did their track inspectors have a copy of the program to determine if the railroad complied with it.

Further, in the Flora, Mississippi accident, we found that an FRA inspector had identified deficiencies, but he did not ensure that these deficiencies were corrected. Thus, we found that the FRA's oversight was ineffective in that case to ensure proper maintenance by the railroad.

Additionally, after an Amtrak derailment at Nottaway, Iowa, we issued a recommendation to the FRA to require railroads to conduct ultrasonic or other appropriate inspections to ensure that rails used to replace rails were free of internal defect. That recommendation is currently classified as open, unacceptable response. Thank you.

Mr. SHUSTER. I have one question, the 76 percent, does that reflect, that you just mentioned earlier, that statutorily they say they don't have the ability to change, which I would imagine some of those 4,000 recommendations, is that accurate?

Ms. BROWN. You said 540?

Mr. SUMWALT. Yes, ma'am, of the 534 recommendations that we have issued, the acceptance rate is 76 1/2 percent.

Mr. SHUSTER. Any of them dealt with fatigue? Because that is something they have said the law won't allow them to—

Mr. SUMWALT. I would have to defer to Mr. Chipkevich to see how we have classified that. That is a good question.

Mr. CHIPKEVICH. Yes, sir, some of those are probably due to some fatigue. But then some were also closed reconsidered, so it would not have a negative impact against the FRA also, because of their response.

Mr. SHUSTER. Thank you.

Ms. BROWN. Anyone else? Yes.

Mr. SCOVEL. Madam Chairwoman, if I may, we are greatly encouraged by the attention to a number of recommendations of ours that the FRA has devoted resources to recently. Attachment 2 to our written testimony is a table illustrating or setting forth the recommendations that we have made to the FRA in our recent reports, and giving the current status. You will see that a number of those have been closed satisfactorily in our review. A number are open, but we are satisfied that current FRA leadership is devoting sufficient attention to those. As I mentioned, the immediate notification requirement is one that we saw most improvement on recently. We are pleased to be able to report that.

We would like to see greater attention to the following items. First moving away from a traditional and reactive approach to oversight by using its inspection and enforcement data to identify safety problems. Number two, issuing safety advisories and regulations to address safety problems before train accidents occur. And again, this would be feasible if FRA aggressively moves to use predictive factors in trying to assess the probability for future train accidents.

Number three, using its National Inspection Plan to better focus its resources on key safety areas, like track defects and improperly lined switches, as well as other human factors. Number four, moving aggressively to implement its initiatives to improve oversight and enforcement, such as implementing our recommendation to work with the other states that continue to have the most grade crossing collisions.

I mentioned the success, apparent success that we believe Louisiana has enjoyed with its State action plan on grade crossing collisions. Texas we understand is moving in that direction. But there are four other states that, together with Louisiana and Texas are responsible for a great number of grade crossing collisions. We would like to see the FRA move quicker and do more with those other states to develop their state action plans.

And finally, we would like FRA to broaden its review of grade crossing collisions in order to verify information with independent sources, like state and local law enforcement.

Ms. BROWN. Ms. Siggerud?

Ms. SIGGERUD. Madam Chairwoman, I would like to answer your question in a couple of parts with regard to the grade. Looking back, I think it's hard to give a grade in the area of rail safety greater than a C, given that we have not seen significant improvement on rail safety accident trends.

However, looking forward, I am standing here with the IG in agreement that we are more hopeful. I would like to say a B going forward, as we look at the initiatives that have taken place over the last couple of years.

I would like to explain why I cannot give an A at this time. There are really two reasons. One is that several of the initiatives, including in the key area of fatigue, do rely on voluntary actions by the railroad.

The second is that we feel that the Railroad Administration needs to look within itself and report to this Committee and others more about the effectiveness of its key enforcement and compliance program. That is, giving violation notices to railroads and fining them. Other modal administrations within this Department have undertaken such an evaluation under our recommendation and found it to be very useful in adjusting their enforcement programs.

Ms. BROWN. Mr. Boardman, do you want to add anything to that?

Mr. BOARDMAN. Yes, ma'am. I guess in the time that I have been here, I would tell you that the people at the FRA get an A for excellence, an A for integrity, an A for teamwork, and an A for partnership.

Ms. BROWN. What was the last one?

Mr. BOARDMAN. Partnership.

Ms. BROWN. Well, I really want to thank the witnesses for their valuable input and testimony and the members for the questions. Members of the Subcommittee may have some additional questions for the witnesses. We will ask you to respond to those in writing. The hearing record will be held open for those responses.

Members are reminded that the Subcommittee will convene for the second part of this hearing tomorrow at 2:00 p.m. Until that time, the Subcommittee stands adjourned.

[Whereupon, at 5:12 p.m., the subcommittee was adjourned.]

U.S. House of Representatives
Committee on Transportation and Infrastructure

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January 24, 2007

SUMMARY OF SUBJECT MATTER

TO: Members of the Subcommittee on Railroads, Pipelines, and Hazardous Materials

FROM: Subcommittee on Railroads, Pipelines, and Hazardous Materials Staff

RE: Hearings on Reauthorization of the Federal Rail Safety Program

PURPOSE OF HEARINGS

The Subcommittee on Railroads, Pipelines, and Hazardous Materials is scheduled to meet on Tuesday, January 30 and Wednesday, January 31, 2007, at 2:00 p.m. to receive testimony on the Federal rail safety program and to discuss proposals for reauthorization of the Federal Railroad Administration.

BACKGROUND

The Federal Railroad Administration (FRA) administers the Federal rail safety program. The FRA is one of 10 agencies within the U.S. Department of Transportation (DOT). It was created in 1966 by the Department of Transportation Act, when all safety responsibilities of the Interstate Commerce Commission were transferred to the DOT.

The FRA's safety responsibilities were further enhanced by the Federal Railroad Safety Act of 1970, the Federal Railroad Safety Authorization Act of 1973, the Federal Railroad Safety and Hazardous Materials Transportation Amendments of 1974, the Federal Railroad Safety Authorization Act of 1976, the Federal Railroad Safety Amendments Act of 1978, the Federal Railroad Safety Authorization Act of 1980, the Railroad Safety and Service Improvement Act of 1982, the Rail Safety Improvement Act of 1988, the Railroad Safety Enforcement and Review Act of 1991, and the Federal Railroad Safety Authorization Act of 1994.

One of the main responsibilities of the FRA is to promulgate and enforce rail safety regulations. It also conducts research and development in support of improved rail safety. In

addition, the FRA has a number of responsibilities relating to rail security, including assessing civil and criminal penalties for actions that impair or impede the operation of railroad equipment.

The FRA has the authority to issue regulations and orders pertaining to rail safety and security and to issue civil and criminal penalties to enforce those regulations and orders. Under current law, all laws, regulations, and orders related to rail safety and security must be nationally uniform to the extent practicable. A State may adopt or continue in force a law, regulation, or order related to rail safety or security until the Secretary of Transportation or the Secretary of Homeland Security prescribes a regulation or issues an order covering the subject matter of the State requirement. A State may adopt or continue in force an additional or more stringent law, regulation, or order only in instances where the law, regulation, or order is necessary to eliminate or reduce an essentially local safety or security hazard; is not incompatible with a law, regulation, or order of the United States Government; and does not unreasonably burden interstate commerce.

The preemption standard has been a concern among some states and localities that have tried to adopt regulations requiring trains to operate at slower speeds and railroads to re-route hazardous materials around heavily populated areas. The preemption standard has also been an issue for rail accident victims who are seeking relief for injuries or damages from the railroads in court. A number of recent Federal court decisions have reached the conclusion that the standard does not just preempt state or local regulations that conflict with Federal regulations, but also preempts state tort liability law, thereby preventing the injured parties from bringing a state suit against the carrier. See *Lundeen v. Canadian Pacific Railway. Co.*, __F.3d__ (No. 05-1918, 8th Cir., May 16, 2006); *Mehl v. Canadian Pacific Railway. Ltd.*, (No. 4-02-cv-009, D.N.D. March 6, 2006). The Subcommittee will hear testimony on this issue.

The FRA relies on 421 Federal safety inspectors and 160 State safety inspectors to monitor the railroads' compliance with federally mandated safety standards. These inspectors operate out of eight regional offices and are divided into five safety disciplines – Track and Structures, Signal and Train Control, Motive Power and Equipment, Operating Practices, Hazardous Materials, and Industrial Hygiene. They also promote numerous initiatives under the Highway-Rail Grade Crossing and Trespasser Prevention Programs.

Central to the success of the Federal rail safety program is the ability to understand the nature of rail-related accidents and to analyze trends in railroad safety. To do this, the FRA relies heavily on information that is reported by the railroads following accidents and incidents. Railroad accident reports attribute more than 90 percent of grade crossing collisions to motorists. According to the DOT Inspector General, the FRA does not routinely review locomotive event recorder data, police reports, and other sources of information to determine the causes of the collisions or the need for further investigation.

The Inspector General also found that the FRA investigated few accidents (it investigates two-tenths of one percent of all accidents and incidents involving railroads) and recommended few findings of violations for critical safety defects identified through inspections. From 2002 through 2004, for example, FRA inspectors identified 7,490 critical safety defects out of 69,405 total safety defects related to automated grade crossing warning signals. Yet, FRA recommended only 347 critical defects, or about 5 percent, for findings of violations that carry a fine. According to the Inspector General, the FRA's policy of inspectors using their discretion in deciding whether to recommend a violation has resulted in the small number of critical defects recommended for

violations. Furthermore, after violations are determined, Federal law allows the FRA to negotiate-down the amount of civil penalties proposed, resulting in the collection of lower penalties, despite the many critical safety defects found.

The FRA has taken action to address some of the concerns raised by the Inspector General, which the Inspector General is expected to address at the hearing.

HUMAN FACTORS AND FATIGUE

According to the FRA, the total number of train accidents, including collisions and derailments, has increased from 2,504 in 1994 (when the FRA was last reauthorized) to 3,325 in 2005. The accident rate – which takes into account the corresponding increase in train miles traveled from about 655 million miles in 1994 to about 790 million miles in 2005 – has remained somewhat level. Meanwhile, fatalities and injuries have increased from 12 fatalities and 262 injuries in 1994 to 33 fatalities and 734 injuries in 2005.

The FRA reports that human factors are responsible for nearly 40 percent of all train accidents, and a new study confirms that fatigue plays a role in approximately one out of four of those accidents.

Researchers analyzed the 30-day work schedule histories of locomotive crews preceding approximately 1,400 train accidents and found a strong statistical correlation between the crew's estimated level of alertness and the likelihood that they would be involved in an accident caused by human factors. The level of fatigue associated with some work schedules was found to be equivalent to being awake for 21 hours following an 8-hour sleep period the previous night. At this level, train accidents consistent with fatigue, such as failing to stop for red signals, are more likely to occur.

The hours of service law, which was originally enacted in 1907, and substantially amended in 1969, deals only with acute fatigue, not with cumulative fatigue. The law permits working 11 hours and 59 minutes followed by eight hours off duty and another 11 hours and 59 minutes on duty, perpetually. That means that a railroad employee who begins a shift on Monday at 8:00 a.m. can be called for a shift on Tuesday at 4:00 a.m., and a shift on Wednesday at midnight. This kind of "backward-rotating shift" can wreak havoc on an employee's circadian rhythm.

Additionally, the law does not address "limbo time," which is the time when a crew's working assignment was finished and they are waiting for transport back to their homes. During limbo time, crewmembers are required to stay awake, alert, and able to respond to any situation and follow the railroad's operating rules, which means that crews are regularly on the job for 15 to 20 hours at a time.

According to the FRA Administrator, Joseph Boardman, "the specified maximum hours on duty and minimum periods off duty, coupled with provisions related to "limbo time" clearly function to permit the occurrence of cumulative fatigue. Because science related to biological rhythms had not been applied to the railroad workplace when Congress last addressed the issue, the hours of service law simply does not deal with the issue."

The DOT on numerous occasions has formally submitted legislation to reform the hours of service law, supplement it with fatigue management requirements, or authorize the FRA to prescribe regulations on fatigue in light of current scientific knowledge. Currently, the statute contains no substantive rulemaking authority over duty hours. The FRA's lack of regulatory authority over duty hours, unique to FRA among all the safety regulatory agencies in the Department, precludes FRA from making use of almost a century of scientific learning on the issue of sleep-wake cycles and fatigue-induced performance failures. The FRA's general safety rulemaking power under 49 U.S.C. 20103 provides ample authority to deal with the entire subject of maximum work periods and minimum rest periods. However, the hours of service laws effectively preclude such a rational regulatory initiative because the chapter 201 authority may be used only to supplement the pre-1970 railroad safety statutes, not to supplant them. Despite the need for reform to address fatigue, no action has been taken.

GRADE CROSSING SAFETY

There are 243,016 grade crossings in the United States, of which 149,628 or 62 percent are public crossings. Of these public crossings, 63,387 or 42 percent have automatic warning devices.

Since the FRA was reauthorized in 1994, significant progress has been made in reducing collisions and fatalities at grade crossings. From 1994 to 2005, total train miles traveled in the United States increased from 655 million miles to 790 million miles, or 17 percent, and the total miles traveled by motor vehicle increased from 2.3 trillion miles to 2.9 trillion miles, or 20 percent. During the same period, collisions at the nation's grade crossings have decreased from 4,979 in 1994 to 3,041 in 2005. Fatalities have also decreased from 615 in 1994 to 357 in 2005, and injuries have decreased from 1,961 to 1,010 during the same period.

The Department of Transportation's (DOT) Inspector General reports that this significant decrease was attributable to the Department addressing much of the "low-hanging fruit," that is, working with the states and railroads to close grade crossings, install automatic gates and flashing lights at public crossings with a high probability for collisions, and educate the public about crossing safety. The Department also made progress in implementing safety initiatives included in its 1994 Grade Crossing Safety Action Plan.

A look at more recent statistics, however, show that the sharp decline in grade crossing statistics has leveled-off. From 2002 to 2005, collisions, fatalities, and injuries have both increased and decreased, but on average have remained around 3,042 collisions. The number of fatalities has remained around 350, and the number of injuries has remained around 1,030. This "leveling-off" combined with the upward trend in train and highway traffic show that more needs to be done to improve grade crossing safety.

Of course, the adequacy of the FRA's grade crossing safety program is dependent on information it receives from the railroads. In July 2004, a series of *New York Times* articles alleged problems with railroad accident reporting, investigations at grade crossings, and several other safety issues. Chairman Oberstar, Chairwoman Brown, and former Senator Ernest Hollings sent a letter to the DOT Inspector General requesting an audit of the FRA's activities to oversee safety on the nation's highway-rail grade crossings.

The Inspector General found that railroads failed to report 21 percent of reportable crossing collisions to the National Response Center (NRC). Railroads are required to report crossing collisions involving fatalities and/or multiple injuries to passengers or train crew members, and fatalities to motorists or pedestrians involved in grade crossing collisions to the NRC. Reports are to be made within two hours after the accidents, according to FRA and NTSB regulations. Immediate reporting allows the Federal Government to decide whether or not to conduct an investigation shortly after a crossing collision has occurred. The DOT Inspector General's analysis showed that 115, or 21 percent, of 543 reportable grade crossing collisions that occurred between May 1, 2003 and December 31, 2004 were not reported to the NRC. Although the 115 unreported crossing collisions, which resulted in 116 fatalities, were reported to the FRA within 30 to 60 days after the collision, as required, that was too late to allow Federal authorities to promptly decide whether or not to conduct an investigation. In July 2004, the FRA began reconciling its database with the NRC to identify unreported accidents, and in March 2005 began issuing findings of violations to railroads failing to follow reporting requirements.

The Inspector General also found that the Federal Government investigated only a small number of grade crossing collisions and needs to collect and analyze independent information on all crossing collisions. From 2000 through 2004, FRA investigated 47 of 376, or 13 percent, of the most serious crossing collisions that occurred — those resulting in three or more fatalities and/or severe injuries. No Federal investigations were conducted for the remaining 329 crossing collisions. Those collisions resulted in 159 fatalities and 1,024 injuries. FRA officials stated that the National Transportation Safety Board (NTSB) is the lead Federal agency responsible for investigating railroad accidents, not FRA. However, the NTSB tends to investigate only high-profile grade crossing collisions. For example, from 2000 though 2004, the NTSB conducted seven grade crossing collision investigations. Consequently, the Federal Government did not independently investigate most crossing collisions, but rather received information concerning the causes of collisions almost exclusively from the railroads.

The railroads' grade crossing accident reports attributed over 90 percent of the collisions that occurred from 2000 through 2004 to motorists, but FRA did not conduct its own investigations to verify the causes. Independently collecting and analyzing information about grade crossing collisions would substantially improve the FRA's ability to determine the causes of grade crossing collisions and better target collisions that should be investigated further. The collection and analysis of this information is especially important given the limited resources of the FRA's inspection staff. Nationwide, 55 of 421 FRA inspectors are assigned to inspect the 63,387 warning signal systems at grade crossings.

The low-level of FRA inspectors combined with the extensiveness of the U.S. railroad system limits the FRA's ability to investigate each accident or incident and inspect each railroad and mile of track. In 2004, the Federal Aviation Administration (FAA) conducted on-site investigations of 1,392, or 93 percent, of the 1,484 general aviation accidents that the FAA had responsibility for investigating in 2004. Unlike the FRA, however, the FAA has an Office of Accident Investigations staffed with 8 full-time investigators whose mission is to detect unsafe conditions and trends and to coordinate the process for corrective actions. In addition, the FAA uses personnel from other disciplines to conduct investigations, including 2,989 inspectors from its Office of Aviation Safety. To partially address this issue, on May 7, 2005 the FRA issued a safety advisory to facilitate the investigation of grade crossing accidents. The advisory reminds railroads of their responsibilities regarding accident investigations and offers technical assistance to local investigative authorities.

As mentioned earlier in the memo (see Background), the Inspector General found that the FRA recommended few violations for the many critical safety defects it identified and should increase its enforcement of existing safety regulations.

Since the release of the Inspector General report, the FRA has taken a number of actions to improve railroad reporting, investigate the information that is reported, and issue higher penalties for grade crossing violations. The Inspector General has tracked the FRA's progress in this area, and is expected to testify on any further developments in this area.

TRACK SAFETY

Track defects are the second leading cause of all train accidents. Most railroads use Continuous Welded Railroad (CWR) track, which is constructed with extremely long lengths of rail rather than traditional 39-foot lengths of rail. With far fewer rail joints than "jointed rail track," continuous welded rail offers a smoother ride and easier track and rail car maintenance. The long lengths of rail, however, are subject to high compressive or tensile forces which can result in the track buckling or pulling apart as the ambient temperature rises and falls.

The FRA issued the first Federal Track Safety Standards in 1971. The FRA addressed CWR in a rather general manner, stating that railroads must install CWR at a temperature that prevents lateral displacement of track or pull-aparts of rail ends and that CWR should not be disturbed at temperatures higher than the installation or adjusted installation temperature. In 1982, the FRA deleted that regulation because it believed it was too general in nature that it provided little guidance to railroads and was difficult to enforce.

The Rail Safety Enforcement and Review Act of 1992 required that the FRA evaluate procedures for installing and maintaining CWR. In 1994, Congress required DOT to evaluate cold weather installation procedures for CWR. In light of the evaluation of those procedures, as well as information resulting from the FRA's own research and development, the FRA included new CWR procedures in its 1998 revision of the Federal track safety standards. The new (and current) regulations require railroads to develop procedures that, at a minimum, provide for the installation, adjustment, maintenance, and inspection of CWR, as well as a training program and minimal recordkeeping requirements. The regulations do not dictate which procedures a railroad must use in its CWR plan, but rather allow each railroad to develop and implement a CWR plan based on its own procedures.

A series of accidents have called into question the adequacy of these regulations, the railroads' track inspection and maintenance programs, and the FRA's oversight of those programs.

On January 18, 2002, a Canadian Pacific freight train derailed 31 of its 112 cars near Minot, North Dakota. Five tank cars carrying anhydrous ammonia, a liquefied compressed gas, catastrophically ruptured, and a vapor plume covered the derailment site and surrounding area. About 11,600 people that occupied the area were affected by the vapor plume. One resident was fatally injured, and 60 to 65 residents of the neighborhood nearest the derailment site were rescued. As a result of the accident, 11 people sustained serious injuries, and 322 people, including the two

train crew members, sustained major injuries. Damages exceeded $2 million, and more than $8 million has been spent in environmental remediation.

In its Railroad Accident Report, the NTSB determined that the probable cause of the derailment was "an ineffective Canadian Pacific Railway inspection and maintenance program that did not identify and replace cracked joint bars before they completely fractured and led to the breaking of the rail at the joint." The NTSB also found that the FRA's requirements regarding rail joint bars in CWR were ineffective and that the FRA's oversight of Canadian Pacific's CWR program was ineffective, because the FRA neither reviewed the CWR program nor ensured that its track inspectors had copies of the CWR programs to determine if the railroad was in compliance with it.

On April 6, 2004, an Amtrak train derailed on Canadian National-owned and maintained track near Flora, Mississippi. The entire train derailed, including one locomotive, one baggage car, and eight passenger cars. The derailment resulted in one fatality, three serious injuries, and 43 minor injuries. The equipment costs associated with the accident totaled about $7 million. In its Railroad Accident Report, the NTSB determined that the probable cause of the accident was "the failure of the Canadian National Railway Company to properly maintain and inspect its track, resulting in rail shift and the subsequent derailment of the train, and the Federal Railroad Administration's ineffective oversight to ensure proper maintenance of the track by the railroad."

On October 16, 2004, a Union Pacific (UP) freight train derailed three locomotives and 11 cars near Pico Rivera, California. Small amounts of hazardous materials were released from the transported cargo. There were no injuries to area residents, the train crew, or the emergency response personnel. UP estimated the monetary damage at $2.7 million. In its Railroad Accident Brief, the NTSB determined "that the probable cause of the derailment was the failure of a pair of insulated joint bars due to fatigue cracking. Contributing to the accident was the lack of an adequate on-the-ground inspection program for identifying cracks in rail joint bars before they grow to critical size."

As a result of the accidents, Congress included a provision in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which required each track owner using CWR track to include in its CWR plan procedures to improve the identification of cracks in rail joint bars; instructed FRA track inspectors to obtain copies of the most recent continuous welded rail programs of each railroad within the inspectors' areas of responsibility and require that inspectors use those programs when conducting track inspections; required the FRA to establish a program to periodically review CWR joint bar inspection data from railroads and track inspectors; and emphasized the need for the FRA to require railroads to increase the frequency of inspection or improve the methods of inspection of joint bars in CWR.

EXPECTED WITNESSES

The Honorable Joseph Boardman
Administrator
Federal Railroad Administration

The Honorable Mark Rosenker
Chairman
National Transportation Safety Board

The Honorable Calvin Scovel
Inspector General
U.S. Department of Transportation

Katherine Siggurud
Director, Physical Infrastructure Issues
U.S. General Accounting Office

Mr. Edward Hamberger
President and Chief Executive Officer
Association of American Railroads

Mr. Richard Timmons
President
American Short Line and Regional Railroad Association

Mr. Edward Wytkind
President
Transportation Trades Department, AFL-CIO

Mr. John Murphy
Rail Conference Director
International Brotherhood of Teamsters

Ms. Shannon Van Dyck
Attorney-at-law
On behalf of the American Association for Justice

Written Statement of Joseph H. Boardman,
Administrator,
Federal Railroad Administration,
U.S. Department of Transportation,
before the
Subcommittee on Railroads, Pipelines, and Hazardous Materials,
Committee on Transportation and Infrastructure,
U.S. House of Representatives

January 30, 2007

Chairwoman Brown, Ranking Member Shuster, and other members of the Subcommittee, I am very pleased to be here today on behalf of the Secretary of Transportation to testify about the reauthorization of the Federal Railroad Administration's (FRA) safety program. My testimony will begin with an overview of how FRA is working daily to reduce both the frequency and the severity of railroad accidents. My testimony will then highlight the real and substantial progress FRA has made in implementing our National Rail Safety Action Plan. Finally, I will touch on our passenger safety rulemakings and other key safety initiatives.

FRA's Railroad Safety Program

FRA is the agency of the U.S. Department of Transportation (DOT) charged with carrying out the Federal railroad safety laws. These laws provide FRA, as the Secretary's delegate, with very broad authority over every area of railroad safety. In exercising that authority, the agency has issued and enforces a wide range of safety regulations covering a railroad network that employs more than 232,000 workers, moves more than 42 percent of all intercity freight, and provides passenger rail service to more than 500 million persons each year. FRA's regulations address such topics as track, passenger equipment, locomotives, freight cars, power brakes, locomotive event recorders, signal and train control systems, maintenance of active warning devices at highway-rail grade crossings, accident reporting, alcohol and drug testing, protection of roadway workers, operating rules and practices, locomotive engineer certification, positive train control, and use of train horns at grade crossings. FRA currently has active rulemaking projects on a number of important safety topics, many of which will be described later in this testimony. FRA also enforces the Hazardous Materials Regulations, promulgated by DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA), as they pertain to rail transportation.

FRA has an authorized inspection staff of about 400 persons nationwide, distributed across its eight regions. In addition, about 160 inspectors employed by the approximately 30 States that participate in FRA's State participation program also perform inspections for compliance with the Federal rail safety laws. Each inspector is an expert in one of five safety disciplines: Track; Signal and Train Control; Motive Power and Equipment; Operating Practices; or Hazardous Materials. FRA also has 18 full-time highway-rail grade crossing safety positions in the field. Every year FRA's inspectors conduct thousands of inspections, investigate more than 100 railroad accidents, investigate hundreds of complaints, develop recommendations for thousands of enforcement actions, and engage in a range of educational outreach activities on

railroad safety issues, including educating the public about highway-rail grade crossing safety and the dangers of trespassing on railroad property.

FRA closely monitors the railroad industry's safety performance, and the agency uses the extensive data gathered to guide its accident prevention efforts. FRA strives to continually make better use of the wealth of available data to achieve the agency's strategic goals. FRA also sponsors collaborative research with the railroad industry to introduce innovative technologies to improve railroad safety. Finally, under the leadership of the U.S. Department of Homeland Security (DHS), FRA actively plays a supportive role in the Federal effort to secure the Nation's railroad transportation system.

The National Rail Safety Action Plan

As detailed in the appendix to my testimony, the railroad industry's overall safety record has improved during recent decades, and most safety trends are moving in the right direction. However, significant train accidents continue to occur, and the train accident rate has not shown substantive improvement in recent years. Moreover, several major freight and passenger train accidents in 2004 and 2005 (such as those at Macdona, Texas; Graniteville, South Carolina; and Glendale, California) raised specific concerns about railroad safety issues deserving government and industry attention.

In May 2005, DOT and FRA announced the National Rail Safety Action Plan, a blueprint to comprehensively address critical safety issues facing the railroad industry with the following strategy:

- Target the most frequent, highest-risk causes of train accidents;
- Focus FRA's oversight and inspection resources on areas of greatest concern; and
- Accelerate research efforts that have the potential to mitigate the largest risks.

The Action Plan includes initiatives intended to:

- Reduce train accidents caused by human factors;
- Address fatigue;
- Improve track safety;
- Enhance hazardous materials safety and emergency preparedness;
- Strengthen FRA's safety compliance program; and
- Improve highway-rail grade crossing safety.

The causes of train accidents are generally grouped into five categories: human factors; track and structures; equipment; signal and train control; and miscellaneous. In the 5 years from 2001 through 2005, the great majority of train accidents resulted from human factor causes or track causes. Accordingly, human factors and track are the major target areas for improving the train accident rate.

Reducing Train Accidents Caused by Human Factors

Development of Rulemaking to Address Leading Causes of Human Factor Accidents

Accidents caused by human factors constitute the largest category of train accidents, accounting for 37 percent of all train accidents in the 5 years from 2001 through 2005. Some human factors are addressed squarely by FRA regulations. For example, FRA's regulations on alcohol and drug use by operating employees were the first such standards in American industry to incorporate chemical testing, and they have been very successful in reducing accidents resulting from the use of illicit substances. FRA also has regulations on locomotive engineer certification, and enforces the Federal hours of service restrictions, which are wholly governed by statute. However, FRA has been concerned that several of the leading causes of human factor accidents are not presently covered by any specific Federal rule, and these causes can have serious consequences.

In May 2005, FRA asked its Railroad Safety Advisory Committee (RSAC) to develop recommendations for a new human factors rule to address the leading causes of human factor accidents. This effort helped lead to FRA's issuance of a Notice of Proposed Rulemaking (NPRM) in October 2006, to Federalize core railroad operating rules governing the handling of track switches, leaving cars in the clear, and shoving rail cars. *See* 71 FR 60371. Overall, the rule proposes to establish greater accountability on the part of railroad management for the administration of railroad programs of operational tests and inspections, and greater accountability on the part of railroad supervisors and employees for compliance with those operating rules that are responsible for approximately half of the train accidents related to human factors. FRA believes this will contribute positively to railroad safety, by emphasizing the importance of compliance with fundamental operating rules and providing FRA a more direct means of promoting compliance. The final rule is expected to be issued later this year.

The final rule is intended to supersede Emergency Order No. 24, which FRA issued in October 2005, in response to an increasing number of train accidents caused by hand-operated, main track switches in non-signaled territory being left in the wrong position and the potential for catastrophic accidents, such as the one in Graniteville, South Carolina, in January 2005, which resulted in nine deaths. The Emergency Order requires special handling, instruction and testing of railroad operating rules pertaining to hand-operated main track switches in non-signaled territory, and is expected to remain in place until the final rule addressing the major causes of human factor accidents is promulgated and becomes effective.

Launch of "Close Call" Pilot Research Project

"Close calls" are unsafe events that do not result in a reportable accident but could have done so. FRA is working to better understand these phenomena. In March 2005, FRA completed an overarching Memorandum of Understanding (MOU) with railroad labor organizations and management to develop pilot programs to document the occurrence of close calls. In other industries, such as aviation, adoption of close-call reporting systems that shield the reporting employee from discipline (and the employer from punitive regulatory sanctions) has contributed to major reductions in accidents. In August 2005, FRA and DOT's Bureau of

Transportation Statistics (BTS) entered into an MOU stipulating that BTS will act as a neutral party to receive the close-call reports and maintain the confidentiality of the person making the report. Four railroads have expressed interest in taking part in this project, and participating railroads will be expected to develop corrective actions to address the problems that may be revealed. Union Pacific Railroad Company (UP) has signed an Implementing MOU for its North Platte Service Unit to be the first site for this project. A kickoff meeting with UP is slated for early next month, and data collection is expected to begin immediately thereafter. Discussions are also underway with BNSF Railway Company (BNSF) and Canadian Pacific Railway for second and third sites for this project.

Development and Implementation of Promising Technologies to Improve Safety

Technology can be a tremendous aid to safety, providing a safety net when human beings err or become incapacitated.

- Positive Train Control (PTC) System. PTC systems are capable of automatically preventing train collisions (with positive stop protection), preventing overspeed derailments, and protecting roadway workers within their authorities. Recognizing the safety benefits of PTC systems, as well as their potential to improve rail efficiency by safely increasing the capacity of high-density rail lines, FRA issued a final rule in 2005 setting out Performance Standards for Processor-Based Signal and Train Control Systems. *See* 49 CFR Part 236. Earlier, FRA worked with Amtrak and other stakeholders to assist in the development of PTC systems in support of high-speed passenger rail. The results included the Advanced Civil Speed Enforcement System, which, combined with cab signals and automatic train control, safeguard operations up to 150 mph on the Northeast Corridor. In addition, the Incremental Train Control System was deployed on Amtrak's Michigan line and currently supports operations up to 95 mph (planned for 110 mph when validation and verification work is complete on the final system).

  - This month, FRA approved operational use of the first PTC system intended for general use, BNSF's Electronic Train Management System. The rail industry is actively advancing the implementation of PTC technology as other railroads—among them, UP, Norfolk Southern Railway Company, CSX Transportation, Inc. (CSX), and the Alaska Railroad—are all making significant strides to develop PTC systems. The Association of American Railroads (AAR) will play a critical role in finalizing interoperability requirements for these technologies.

- Switch Point Monitoring System and Other Systems. There are steps that can be taken short of PTC to reduce risk in non-signalized territory while PTC systems are deployed. In November 2005, FRA partnered with BNSF through a $1 million Switch Point Monitoring System pilot project. The main objective of the project is to develop a low-cost system that electronically monitors for and reports a misaligned switch on main line track located in dark (non-signaled) territory. The project involves the installation of wireless communication devices at 49 switches along a 174-mile section of non-signaled BNSF track between Tulsa and Avard, OK. Train

dispatchers at an operations center in Fort Worth, TX, are monitoring the devices to detect when the hand-operated switches are set in the wrong position. If a switch is misaligned, the dispatcher directs a train to slow down or stop until railroad crews in the field confirm it is safe to proceed. Along with the human factors rulemaking, this new switch monitoring system may prevent future train accidents such as the one at Graniteville, which resulted from an improperly lined main track switch in non-signaled territory.

- BNSF is also demonstrating rail integrity circuits, which can detect broken rails and alert the dispatcher much in the same way as the switch point monitoring technology. Both of these technologies are "forward-compatible" with PTC, meaning that they can be integrated into PTC as it is deployed on the subject territories.

- Electronically Controlled Pneumatic (ECP) Brakes. In 2005, 14 percent of main track, human factor-caused accidents involved improper train handling or misuse of the automatic braking system. A significant number of these events might have been avoided if locomotive engineers were given a more suitable air brake system to use as a tool. During the 1990s, the AAR led an industry effort to develop ECP brakes, which use an electronic train line to command brake applications and releases. ECP brakes apply uniformly and virtually instantaneously throughout the train, provide health status information on the condition of brakes on each car, respond to commands for graduated releases, and entirely avoid runaway accidents caused by depletion of train-line air pressure. ECP brakes shorten stopping distances on the order of 40 to 60 percent, depending on train length and route conditions. In turn, shortened stopping distances mean that some accidents that occur today might be avoided entirely, and some others might be reduced in severity. (I would hasten to add that our ongoing safety analysis confirms that most grade crossing accidents, in particular, could not be prevented by ECP brakes, because motorist actions become manifest only seconds before the collision.)

  - FRA commissioned a study released last year that identified and quantified significant business benefits that could be realized with this technology through greater operational efficiencies and suggested a migration plan that would start with unit train operations, logically focused initially on the Powder River Basin coal service. Since then, FRA has been working with the AAR, railroads, vendors and the coal sector to generate momentum toward implementation of this cost- and, potentially, life-saving technology. In this regard, ECP brakes are one of the key features of FRA's Advanced Concept Train, a train specially designed and equipped with other improvements that is helping to demonstrate the potential of these new technologies across the Nation. FRA is also planning to develop a revised set of requirements for train air brakes that are more suitable for this new technology, by issuing a notice of proposed rulemaking some time in the near future. Until a final rule is issued amending the train air brake requirements, we remain ready to review and respond to requests for relief from railroads interested in proceeding with ECP technology, and are in the process of reviewing one now.

Addressing Fatigue

Fatigue has long been a fact of life for many railroad operating employees, given their long and often unpredictable work hours and fluctuating schedules. Train crews may legally work an enormous number of hours in a week, month, or year. While commuter train crews often have some predictability in their work schedules, crews of freight trains rarely do. The long hours, irregular work/rest cycles, and lack of regular days off, combined, have a very deleterious effect on employee alertness. Railroads are necessarily 24-hour businesses, and the effects of "circadian rhythms" challenge the alertness of even well-rested employees, particularly in the early morning hours. The hours of service law, originally enacted in 1907 and last substantially amended in 1969, sets certain maximum on-duty periods (generally 12 hours for operating employees) and minimum off-duty periods (generally 8 hours, or if the employee has worked 12 consecutive hours, a 10-hour off-duty period is required). However, the limitations in that law, although ordinarily observed, do not seem adequate to effectively control fatigue.

I appreciate the Subcommittee's recognition of the importance fatigue has on railroad safety by devoting a separate hearing on this matter next month. As a result, I will not take up the Subcommittee's time on this issue at this hearing and look forward to sharing with the Subcommittee in depth FRA's current efforts and plans to address railroad fatigue.

Improving Track Safety

Track-caused accidents are the second-largest category of train accidents, comprising 34 percent of all train accidents. Some of the leading causes of track-caused accidents are difficult to detect during normal railroad inspections. Broken joint bars, for example, are a leading cause, but the kinds of cracks in those bars that foreshadow a derailment-causing break are difficult to spot with the naked eye. Similarly, broken rails account for some of the most serious accidents, but the internal rail flaws that lead to many of those breaks can be detected only by specialized equipment.

Demonstration of New Technology to Detect Cracks in Joint Bars

FRA is developing an automated, high-resolution video inspection system for joint bars that can be deployed on a hi-rail vehicle to detect visual cracks in joint bars without having to stop the vehicle. In October 2005, a prototype system that inspects joint bars on both sides of each rail was successfully demonstrated. Testing showed that the high-resolution video system detected cracks that were missed by the traditional visual inspections. The system was then enhanced with new features to improve the reliability of joint bar detection and to add capabilities to include the Global Positioning System coordinates for each joint to facilitate future inspection and identification. Additionally, software was developed to scan the images automatically, detect the cracked joint bar, and then send a message to the operator with an image of the broken joint bar. The new features were implemented and the system was tested and demonstrated in the summer of 2006. This year, FRA intends to make additional enhancements to increase the operating speed and implement a more rugged, simple, and robust detection system.

Requirements for Enhanced Capability and Procedures to Detect Track Defects

FRA is also addressing joint bar cracks on the regulatory front. As a direct result of a Congressional mandate in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and of National Transportation Safety Board (NTSB) recommendations arising out of various accidents involving cracked joint bars, FRA published an interim final rule (IFR) in November 2005 concerning the inspection of joints in continuous welded rail (CWR) track. Subsequently, after soliciting public comment and advice from RSAC's Track Safety Standards Working Group, FRA issued a final rule in October 2006, which adopted portions of the IFR and made changes to other provisions. The final rule requires track owners to develop and implement a procedure for the detailed inspection—including on-foot inspection—of CWR rail joints, to identify joint bar cracks and joint conditions that can lead to the development of these cracks. Track owners must now also create and submit fracture reports to FRA whenever a cracked or broken joint bar is discovered in CWR track. Based on the data that FRA will collect from the fracture reports, FRA will establish a program to review the root causes of joint bar failure. In addition, the rule encourages railroads to develop and adopt automated methods to improve the inspection of rail joints in CWR track.

Deployment of Two Additional Automated Track Inspection Vehicles

Subtle track geometry defects, such as rails being uneven or too far apart, are difficult to identify during a typical walking or hi-rail inspection. That is why FRA has developed automated track inspection and research vehicles to enhance the capability to identify problems, and ensure that they are addressed, before a train accident occurs. In May 2005, FRA added the T-18 vehicle to its fleet. Two more inspection vehicles with similar technology are currently being readied (one that is self-propelled and one that is towed), and they are expected to be delivered within the next 2 months. Once fully operational, they will allow FRA to inspect nearly 100,000 track-miles each year, three times as much as FRA currently inspects. This additional capability will permit FRA to inspect more miles of major hazardous materials (hazmat) and passenger routes, while also having the ability to follow up more quickly on routes where safety performance is substandard.

Improving Hazardous Materials Safety and Emergency Response Capability

The railroad industry's record on transporting hazmat is very good. The industry transports nearly two million shipments of hazmat annually, ordinarily without incident. However, the Graniteville accident in 2005, which alone involved nine deaths as the result of a chlorine release, demonstrates the potential for catastrophic consequences from train accidents. The agency is actively engaged in a variety of activities intended to reduce the likelihood that a tank car may be breached if an accident does occur, complementing our effort to reduce the likelihood of train accidents. Realizing that we cannot prevent all accidents, FRA has developed initiatives to ensure that emergency responders will be fully prepared to minimize the loss of life and damage when an accident or release does occur.

It is important to emphasize that these safety initiatives are in addition to and complement efforts by FRA, DHS and its Transportation Security Administration (TSA), and PHMSA to

provide for the security of hazmat transported by rail. A major component of this effort has been PHMSA's March 2003 regulation requiring each shipper and carrier of significant quantities (placardable amounts) of hazmat to adopt and comply with a security plan. *See* 49 CFR § 172.800 *et seq*. Last December, in consultation with FRA and TSA, PHMSA published an NPRM to revise current requirements for the security of hazmat transported by rail, with particular focus on toxic inhalation hazard materials, such as chlorine and anhydrous ammonia. *See* 71 FR 76833. This proposal would require consideration of both safety and security in evaluating routing of hazardous materials and the mitigation of hazards on the routes selected. PHMSA and FRA will hold two public meetings, one on February 1, in Washington, D.C., and the second on February 9, in Dallas, Texas, to obtain oral comments on the proposed requirements, with a view to issuing a final rule.

The safety and security of hazmat transported by rail are often intertwined, and I would be glad to provide the Subcommittee with additional information concerning the many security initiatives in this area.

Enhancements to Emergency Response Readiness

Emergency responders presently have access to a wide variety of information regarding hazmat transported by rail. Railroads and hazmat shippers are currently subject to the hazard-communication requirements of the Hazardous Materials Regulations. In addition, these industries work through the American Chemistry Council's Transcaer® (Transportation Community Awareness and Emergency Response) program to familiarize local emergency responders with railroad equipment and product characteristics. PHMSA publishes the Emergency Response Guidebook, with the intention that it may be found in virtually every fire and police vehicle in the United States.

In March 2005, with FRA encouragement, the AAR amended its Recommended Operating Practices for Transportation of Hazardous Materials (now Circular No. OT-55-I) to expressly state that local emergency responders, upon written request, will be provided with a list ranking the top 25 hazardous materials transported by rail through their communities. This is an important step to allow emergency responders to plan for, and better focus their training on, the type of rail-related hazmat incident that they could potentially encounter.

In July 2005, again with FRA encouragement, CSX and CHEMTREC (the chemical industry's 24-hour resource center for emergency responders) entered into an agreement to conduct a pilot project to see if key information about hazmat transported by rail could be more quickly and accurately provided to first responders in the crucial first minutes of an accident or incident. The project is designed so that if an actual hazmat rail accident or incident occurs, CHEMTREC watchstanders, who interact with emergency response personnel, will have immediate access to CSX computer files regarding the specific train, including the type of hazmat being carried and its exact position in the train consist. CSX has advised that there has been sufficient use of the current system to begin evaluating the project, and that is scheduled to being early this year. FRA is also working through the AAR to encourage the other major railroads to participate in a similar project.

In addition, another pilot project is underway to evaluate the use of Railinc Corporation's Freightscope, a program that provides equipment search capabilities for hazmat shipments. The system was installed at CHEMTREC in December 2006, and it has the potential to more rapidly provide information about hazmat shipments on shortline and regional railroads to CHEMTREC watchstanders to improve information availability and reduce delays in emergency response. The pilot project is scheduled to last a year, and includes various tests to determine the system's effectiveness. Two tests have already been conducted with good results.

Improvements in Tank Car Integrity through Research and Development

Prior to the August 2005 enactment of SAFETEA-LU, FRA had initiated tank car structural integrity research stemming from the circumstances of the 2002 derailment in Minot, North Dakota, involving the release of anhydrous ammonia from a tank car punctured during the derailment. Current research involves a three-step process to assess the effects of various types of train accidents (e.g., a derailment or collision) on a tank car. The first phase is the development of a physics-based model to analyze the kinematics of rail cars in a derailment. The second phase is the development of a valid dynamic structural analysis model; and the third phase is an assessment of the damage created by a puncture and entails the application of fracture mechanics testing and analysis methods. DOT's Volpe National Transportation Systems Center (Volpe Center), part of the Research and Innovative Technology Administration (RITA), is doing the modeling work now, and FRA will dovetail this ongoing research with the requirements of the statute. FRA, in conjunction with PHMSA, hopes to develop new hazardous material tank car safety standards in 2008.

In addition to focusing on strengthening the structural integrity of the tank car to reduce the probability that a collision will result in release of a hazardous commodity, the project is also evaluating technology such as pushback couplers, energy absorbers, and anti-climbing devices designed to prevent a train derailment in the first place. We are currently consulting with railroads, shippers, and car manufacturers and have solicited public comments in this initiative.

To further these efforts, FRA just signed a Memorandum of Cooperation with Dow Chemical Company, UP, and the Union Tank Car Company to participate in their Next Generation Rail Tank Car Project. The agreement provides for extensive information sharing and cooperation between ongoing FRA and industry research programs to improve the safety of rail shipments of hazardous commodities such as toxic inhalation hazards and high-risk gases and liquids.

Further, in September 2006, FRA awarded $200,000 to test sample tank car panels with various coatings to determine their ability to prevent penetration from small arms fire, as well as their ability to self-seal and, thereby, mitigate the severity of any incident. FRA developed the project in coordination with the AAR and DHS, which came up with the idea of applying to tank cars a protective coating like that used to enhance the armor protection of military vehicles in Iraq.

Strengthening FRA's Safety Compliance Program

Implementation of National Inspection Plan

FRA continually seeks ways to direct its inspection and enforcement efforts toward the issues and locations most in need of attention. To this end, FRA instituted the National Inspection Plan (NIP), an inspection and allocation program that uses predictive indicators to assist FRA in allocating inspection and enforcement activities within a given region by railroad and by State. In essence, it makes use of existing inspection and accident data in a way that identifies potential safety "hot spots" so they can be corrected before a serious accident occurs. In April 2005, Operating Practices, Track, and Motive Power and Equipment became the first FRA safety disciplines to use the NIP, since the corresponding accident causes (human factors, track, and motive power and equipment) together account for a total of about 84 percent of all train accidents. This was followed by the Signal and Train Control and Hazardous Materials disciplines in March 2006. A reduction in both the number and the rate of train accidents is expected once the NIP has had time to take its full effect and FRA refines its application in response to actual experience.

Revisions to Schedules of Civil Penalties for Safety Violations

In December 2006, FRA published proposed statements of agency policy that would amend the 25 schedules of civil penalties issued as appendixes to FRA's safety regulations, to reflect more accurately the safety risks associated with violations of the rail safety laws and regulations, as well as to make sure that the civil penalty amounts are consistent across all safety regulations. *See* 71 FR 70589. While the minimum and maximum civil penalty amounts that may be assessed for all rail safety violations have been adjusted in recent years, the guideline penalty amounts for specific rail safety violations have not. FRA therefore decided to reevaluate the penalty amounts in the schedules using a severity scale with particular consideration to the likelihood that an accident or incident would result from, and/or be aggravated by, a failure to comply with a specific regulatory provision. Because the schedules are statements of agency policy, FRA has authority to issue the revisions without having to follow the notice and comment procedures of the Administrative Procedure Act. Nevertheless, FRA is providing members and representatives of the general public an opportunity to comment on the proposed revisions before amending them. This initiative will complement FRA and PHMSA's evaluation of guideline penalty amounts for specific violations of the Hazardous Materials Regulations, and adjustments in guideline penalty amounts made, while revising the minimum and maximum civil penalty amounts for violations of the hazmat transportation laws pursuant to Title VII of SAFETEA-LU. *See* 71 FR 77293.

Fostering Further Improvements in Highway-Rail Grade Crossing Safety

Deaths in highway-rail grade crossing accidents are the second-leading category of fatalities associated with railroading. (Trespasser fatalities are the leading category.) The number of grade crossing deaths has declined substantially and steadily in recent years. However, the growth in rail and motor vehicle traffic continues to present challenges.

Issuance of Safety Advisory 2005-03

In May 2005, FRA issued Safety Advisory 2005-03, which describes the roles of the Federal and State governments and of the railroads in grade crossing safety. It also specifically reminds railroads of their responsibilities to report properly to FRA any accident involving a grade crossing signal failure; to maintain records relating to credible reports of grade crossing warning system malfunctions; to preserve the data from all locomotive-mounted recording devices following grade crossing accidents; and to cooperate fully with local law enforcement authorities during their investigations of such accidents. FRA also offers assistance to local authorities in the investigation of crossing accidents where information or expertise within FRA control is required to complete the investigation. FRA has extensively distributed this advisory through national law enforcement organizations and through contacts with local agencies.

Development of State-Specific Grade Crossing Safety Action Plans

In June 2004, DOT and FRA issued an Action Plan for "Highway-Rail Crossing Safety and Trespass Prevention" that sets forth a series of initiatives in the areas of engineering, education, and enforcement to reduce and prevent highway-rail grade crossing accidents. As one of these initiatives, FRA began working with the State of Louisiana in March 2005 to develop its own action plan for grade crossing safety, to address high numbers of grade crossing accidents and deaths at the State level. The action plan focuses on reducing collisions between trains and motor vehicles at grade crossings where multiple collisions have occurred. After a cooperative effort between the Louisiana Department of Transportation and Development, Federal Highway Administration, FRA, and other stakeholders, the State approved the action plan in April 2006. The State of Texas is currently working with FRA to develop a similar, State-specific action, and FRA is encouraging other States with high numbers of grade crossing accidents and deaths to do the same.

Focus on Pedestrian Safety

In addition, FRA will work with the grade crossing safety community to determine appropriate responses to pedestrian fatalities at grade crossings. Early in 2006, the Transportation Research Board devoted an entire session of its annual meeting to pedestrian grade crossing safety issues in order to capture information on how to improve safety in this area. By this spring, FRA will publish a compilation of information on existing pedestrian safety devices currently being used in the Nation so that those making decisions on methods to improve pedestrian safety may have resource material available.

Inquiry on Safety of Private Grade Crossings

In June 2006, FRA initiated an inquiry into the safety of private grade crossings. Approximately 10 percent of grade crossing collisions occur at privately-owned crossings. However, there is little governmental safety oversight of these crossings, at either the State or Federal level. As a result, in cooperation with appropriate State agencies, FRA has been soliciting oral statements at a series of public meetings throughout the Nation on issues related to the safety of private grade crossings, including current practices concerning responsibilities for

safety at these crossings, the adequacy of warning devices at the crossings, and the relative merits of a more uniform approach to improving safety at private crossings. The next and final meeting is scheduled to be held in Syracuse, New York, on February 15. FRA has also opened a public docket on these issues, so that interested parties may submit written comments for public review and consideration. The statements made and comments received will help inform decisions on what action needs to be taken to address the safety of private grade crossings.

Passenger Rail Safety Initiatives

While the National Rail Safety Action Plan focuses on improving the safety of freight railroad operations and grade crossings, FRA has also been making important progress on the safety of railroad passengers. Let me summarize some of the agency's recent passenger rail safety initiatives.

Passenger Safety Rulemakings

FRA is hard at work on several rulemakings specifically designed to improve rail passenger safety. First, as a result of consensus recommendations from RSAC, in August 2006 FRA proposed new passenger rail safety standards to improve evacuation of passengers from trains, provide additional ways for rescuers to access the passenger car in case of an emergency, and enhance onboard emergency communication systems. FRA is in the process of preparing the final rule, which is expected to be issued some time in the near future. Moreover, a separate regulatory proposal is also in development within the Emergency Preparedness Task Force, focusing on passenger car emergency signage, low-location exit path marking, and emergency lighting. The proposal under development is based on American Public Transportation Association (APTA) standards for passenger safety and is intended to augment current Federal requirements. FRA is also preparing a proposed rule to implement the RSAC's recommendations to enhance structural strength requirements for the front of cab cars and multiple-unit locomotives. These enhancements would include the addition of "energy deformation" requirements specified in revised APTA standards for front-end collision posts and corner posts for this equipment.

Passenger Safety Research and Development

- Crash Energy Management (CEM) Systems. Research has shown that passenger rail equipment crashworthiness in train-to-train collisions can be significantly increased if the equipment structure is engineered to crush in a controlled manner. For several years, FRA has been advancing this engineering approach, termed CEM, with strong support from RITA's Volpe Center. First use of this concept on the North American continent was in design of Amtrak's Acela Express trainset. In March 2006, FRA successfully conducted the last of a series of full-scale passenger train crash tests at FRA's Transportation Technology Center in Pueblo, Colorado, to evaluate new CEM technology that might be applied to conventional equipment. In this test, a passenger train that had been equipped with a CEM system that included sacrificial crush zones in unoccupied spaces, pushback couplers designed to retract and absorb energy, and specially designed anti-climbers to keep the train in line, better protected the spaces

intended to be occupied by passengers and train crewmembers. Also tested were new passenger seats with special padding and new tables with crushable edges, to help prevent and mitigate passenger injuries. Use of this integrated CEM technology is expected to save lives by more than doubling the speed at which all passengers are expected to survive a train crash.

- The Southern California Regional Rail Authority (Metrolink) is in the process of procuring a new fleet of cars utilizing CEM technology. Metrolink's procurement is being facilitated by the completed work of an RSAC working group, the CEM Working Group, specially tasked in May 2005 to develop a detailed technical specification for implementing CEM technology in passenger rail cars. The South Florida Regional Transportation Authority (SFRTA) has joined Metrolink in procuring equipment using this specification, and FRA expects other passenger railroads to include the specification in future procurements of their own.

- Rollover Rig. In May 2006, FRA unveiled a state-of-the-art Passenger Rail Vehicle Emergency Evacuation Simulator, also known as a "Rollover Rig." It has the unique ability to roll a full-sized, commuter rail car up to 180 degrees, effectively turning it upside down, to simulate passenger train derailment scenarios. The Rollover Rig is already enhancing the ability of researchers to test strategies for evacuating passenger rail cars and to evaluate the performance of emergency systems in the cars, such as emergency lighting, doors, and windows. In addition, first responders nationwide now have a unique training tool to practice effective passenger rail rescue techniques safely when a rail car is on its side. FRA developed the Rollover Rig at a cost of $450,000. New Jersey Transit Rail Operations donated the commuter rail car used by the Rollover Rig, and the Washington Metropolitan Area Transit Authority agreed to house, operate, and maintain the simulator at its emergency response training facility located in Landover, Maryland.

Collision Hazard Analysis

"Collision Hazard Analysis" is a specific type of safety review that seeks to identify collision hazards and to develop reasonable solutions to eliminate or mitigate these hazards. Collision hazards include conditions and activities that increase the risk of collisions between trains or other on-track equipment, between trains and motor vehicles/pedestrians, or between trains and fixed objects along the right of way. FRA strongly believes that the performance of a Collision Hazard Analysis will strengthen and support the passenger rail system safety process that grew out of the combined experience of the agency and the commuter railroads under Emergency Order No. 20. FRA and the Volpe Center have partnered with APTA to conduct important pilot projects regarding Collision Hazard Analysis. During the first pilot project, FRA, the Volpe Center, and APTA worked cooperatively to train and mentor a hazard analysis team at Tri-Rail, SFRTA's commuter service, which volunteered to be the first commuter railroad to conduct this analysis. The Tri-Rail project proved very successful and served as the model for a Collision Hazard Analysis pilot project on the Virginia Railway Express, completed last fall. The effort was also very successful and provided further insight into the collision hazard analysis process. Based on positive experiences on both pilot projects, FRA strongly advocates that all

commuter operators undertake a Collision Hazard Analysis. The analysis is especially useful for "New Start" rail projects where design and operational decisions can be readily influenced.

The Gap

Recent attention has been focused on passenger safety at stations with high-level platforms where there are gaps between passenger car doorways and the platform. On August 5, 2006, a young woman fell into a gap between the platform and the Long Island Rail Road (LIRR) commuter train she was exiting from, and was ultimately struck and killed by another train. FRA staff conducted an informal survey of standards used for determining gap distance, and found a great deal of variation in standards among commuter railroads. Visits to station platforms at six selected railroads found considerable variations in gap length. Setting and maintaining an acceptable gap is a complicated process affected by passenger equipment types, track maintenance, track curvature, and platform configuration. The gap is also affected when freight trains or specialized equipment must use the same track used for passenger boarding.

FRA has made this issue a priority. FRA has established an RSAC task force on General Passenger Safety to specifically address safety concerns associated with platform gaps and other matters directly affecting passenger safety on or around station platforms, and to make any necessary recommendations to FRA for regulatory action. The first meeting of the task force is scheduled for February 13 and 14.

Conclusion

FRA's approach to enhancing the safety of rail transportation is multifaceted. In combination, the strategies for comprehensive safety assurance and hazard mitigation that I have discussed today are providing FRA with an effective and cost-based decisionmaking process to collect information that FRA believes will make rail operations safer for the public and the rail transportation industry. I look forward to discussing with the Subcommittee strategies and priorities for making our Nation's railroad system even safer.

APPENDIX

The Railroad Industry's Safety Record

The railroad industry's overall safety record is very positive, and most safety trends are moving in the right direction. While not even a single death or injury is acceptable, progress is continually being made in the effort to improve railroad safety. This improvement is demonstrated by an analysis of the Federal Railroad Administration's (FRA) database of railroad reports of accidents and incidents that have occurred over the nearly three decades from 1978 through 2005. (The low point of rail safety in recent decades was 1978, and 2005 is the last complete year for which nearly final data are available.) Between 1978 and 2005, the total number of rail-related accidents and incidents has fallen from 90,653 to 13,969, an all-time low representing a decline of 85 percent. Between 1978 and 2005, total rail-related fatalities have declined from 1,646 to 888, the second-lowest number on record and a reduction of 46 percent. From 1978 to 2005, total employee cases (fatal and nonfatal) have dropped from 65,193 to 5,643, the record low; this represents a decline of 91 percent. In the same period, total employee deaths have fallen from 122 in 1978 to 25 in 2005, a decrease of 80 percent.

Contributing to this generally improving safety record has been a 71 percent decline in train accidents since 1978 (a total of 3,225 train accidents in 2005, compared to 10,991 in 1978), even though rail traffic has increased. (Total train-miles were up by 5 percent from 1978 to 2005.) In addition, the year 2005 saw only 37 train accidents out of the 3,225 reported in which a hazardous material was released, with a total of only 50 hazardous material cars releasing some amount of product, despite about 1.7 million movements of hazardous materials by rail.

In other words, over the last approximately three decades, the number and rate of train accidents, total deaths arising from rail operations, employee fatalities and injuries, and hazardous materials releases all have fallen dramatically. In most categories, these improvements have been most rapid in the 1980s, and tapered off in the late 1990s. Causes of the improvements have included a much more profitable economic climate for freight railroads following deregulation in 1980 under the Staggers Act (which led to substantially greater investment in plant and equipment), enhanced safety awareness and safety program implementation on the part of railroads and their employees, and FRA's safety monitoring and standard setting (most of FRA's safety rules were issued during this period). In addition, rail remains an extremely safe mode of transportation for passengers. Since 1978, more than 10.7 billion passengers have traveled by rail, based on reports filed with FRA each month. The number of rail passengers has steadily increased over the years, and since 2000 has averaged more than 500 million per year. Twelve rail passengers were killed in train collisions and derailments in 2005, including ten that died in the Glendale, California tragedy. On a passenger-mile basis, with an average about 15.5 billion passenger-miles per year since the year 2000, rail travel is about as safe as scheduled airlines and intercity bus transportation and is far safer than private motor vehicle travel. Rail passenger accidents–while always to be avoided–have a very high passenger survival rate.

As indicated previously, not all of the major safety indicators are positive. Grade crossing and rail trespasser incidents continue to cause a large proportion of the deaths associated with railroading. Grade crossing and rail trespassing deaths accounted for 93 percent of the 888

total rail-related deaths in 2005. In recent years, rail trespasser deaths have replaced grade crossing fatalities as the largest category of rail-related deaths. In 2005, 467 persons died while on railroad property without authorization, and 357 persons lost their lives in grade crossing accidents. Further, significant train accidents continue to occur, and the train accident rate per million train-miles has not declined at an acceptable pace in recent years. It actually rose slightly in 2003 and 2004 (to 4.05 and 4.38, respectively) compared to that in 2002 (3.76), although it dropped in 2005 (to 4.08). As stated in the main testimony, the causes of train accidents are generally grouped into five categories: human factors; track and structures; equipment; signal and train control; and miscellaneous. The great majority of train accidents are caused by human factors and track. In recent years, most of the serious events involving train collisions or derailments resulting in release of hazardous material, or harm to rail passengers, have resulted from human factor or track causes. Accordingly, the National Rail Safety Action Plan makes human factors and track the major target areas for improving the train accident rate.

STATEMENT OF
THE HONORABLE CORRINE BROWN, CHAIRWOMAN
SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS
HEARING ON REAUTHORIZATION OF THE FEDERAL RAIL SAFETY PROGRAM
TUESDAY, JANUARY 30, 2007

The Subcommittee on Railroads, Pipelines, and Hazardous Materials will come to order.

The Subcommittee is meeting today to hear testimony on Reauthorization of the Federal Rail Safety Program.

Since this is our first meeting of the 110th Congress, I believe this is a good opportunity to outline the near-term agenda of the Subcommittee, and our efforts to address many of the transportation challenges facing this country.

First, let me say how pleased I am to serve as the Chairwoman of the Subcommittee on Railroads, Pipelines, and Hazardous Materials. I have loved the railroads since I was a child watching the *Silver Meteor* pass by my house every day.

I am also pleased with the opportunity to work with my Republican colleague, Congressman Bill Shuster of Pennsylvania. Congressman Shuster is a strong advocate on the issues before this Subcommittee, and I look forward to working with him in his new role as Ranking Republican.

The Subcommittee will have an active agenda in the coming weeks and months, starting with reauthorization of the Federal rail safety program. I have scheduled these two days of hearings to give

members ample time to examine the state of rail safety in the U.S. Additional hearings are scheduled for February, including a February 13th hearing on Fatigue in the Rail Industry.

It is my hope that we can build upon the past bipartisan efforts of this Subcommittee, and move a rail safety bill through the Committee to the floor of the House before the Memorial Day district work period.

Congress last passed legislation to reauthorize the Federal Railroad Administration (FRA) in 1994. That authorization expired in 1998. Since that time, the railroad industry has changed dramatically. Economic growth and an increase in international trade have led to record traffic levels. At the same

time, Amtrak and the commuter railroads – which often operate on freight rail lines – are moving more passengers, which means that there is a lot of pressure on our rail system. This has a significant impact on worker and public safety.

According to the FRA, train accidents have increased by 33 percent since 1994. Fatalities and injuries have also increased – from 12 fatalities and 262 injuries in 1994 to 33 fatalities and 734 injuries in 2005. Injuries hit an all-time high of 1,884 in 2002 due to the train accident in Minot, North Dakota.

On the other hand, grade crossing incidents and the related fatalities and injuries have decreased.

Of course, when looking at these numbers, we also have to consider the increase in train traffic from 650 million train miles in 1994 to 790 million train miles in 2005. So we have to look at accident rates.

According to the FRA, the train accident rate has increased since 1994 while the grade crossing incident rate has decreased and leveled-off since 2002.

40 percent of all train accidents are the result of human factors; 30 percent are the result of defective track. I am interested in hearing what the FRA is doing to reduce accidents, and what Congress should do to improve the Federal rail safety program.

Before I yield to Mr. Shuster for his statement, I want to mention that we have a few Members returning to the Subcommittee, and a fair number of new Members joining us this year. I look forward to getting to know each of my colleagues, learning about their needs, and working together to address many of their concerns.

Mr. Shuster.

Statement by Congressman Jerry F. Costello
Committee on Transportation and Infrastructure
Subcommittee on Railroads
Hearing on the Reauthorization of the Federal Rail Safety Program
January 30, 2007

Thank you, Madame Chairwoman. I am pleased to be here today as we evaluate the Federal rail safety program and to discuss proposals for reauthorization of the Federal Railroad Administration (FRA). I would like to welcome today's witnesses.

According to the FRA, railroad safety has improved significantly in the past 20 years. Grade crossing protection technologies, including better engineering, grade crossing elimination, highway traffic enforcement and education, have reduced incidents between automobiles and trains.

However, when we look at the most recent grade crossing numbers, from 2002 to 2005, collisions, fatalities, and injuries have fluctuated, but on average have remained around 3042 collisions. This "leveling off" combined with the upward trend in train and highway traffic show that more needs to be done to improve grade crossing safety. In my congressional district, we recently had a grade crossing accident. On November 20, 2006, in Marissa, IL, three people were killed and one was severely injured when a train struck an SUV at the South Main Street railroad crossing.

While we worked with the Illinois Commerce Commission to get safety gates expeditiously installed at the crossing, there is more that can and should be done. Because so many of these accidents are driver error, continued education regarding warning signage and markings surrounding grade crossings as well as community outreach and awareness is greatly needed. The successful Operation Lifesaver program, which we use in Illinois, has advanced safety and education programs and we must continue to support these initiatives.

I look forward to today's hearing as we discuss the Federal rail safety program.

For the Record

COMMITTEE ON TRANSPORTATION & INFRASTRUCTURE
Subcommittee on Railroads, Pipelines, and Hazardous Materials

"Current Federal Railroad Administration Safety Initiatives"

January 30, 2007
2:00 p.m.
Room 2167, Rayburn House Office Building

Opening Statement of Congressman Elijah E. Cummings

Madam Chair:

I congratulate you on your election as Chair of the Subcommittee on Railroads, Pipelines, and Hazardous Materials and I look forward to working closely with you!

According to the U.S. Department of Transportation and the Association of American Railroads, in 2004, nearly 98,000 miles of Class I freight railroad were operated in the United States and more than 162,000 people were employed by railroads. In that same year, North American

railroads originated nearly 40 million carloads of freight carrying more than 40 percent of our domestic freight by total weight.

By any measure, railroads are an essential part of our national transportation network – and I trust that under your leadership during the 110th Congress, our Subcommittee will take the opportunity to develop innovative policies to strengthen our nation's rail industry.

I commend the Chair for holding the first Subcommittee hearing on the issue of rail safety. In recent years, rail safety has not received the attention from this Subcommittee that it merits and during those years, human factors have become the single largest cause of train

accidents, accounting more than 1,200 accidents in 2005.

I hope that our hearings today will begin the detailed study and analysis that will culminate in robust legislation to strengthen our nation's rail safety programs and respond directly to our most critical rail safety challenges, including grade crossing accidents, worker fatigue, and the transportation of hazardous materials by rail.

Today's hearing is particularly timely given that the Government Accountability Office has just released a new report on the Federal Railroad Administration's effort to implement rail safety measures. The report suggests that FRA's new "National Rail Safety Plan" offers a strong framework for enabling the FRA to guide new rail safety efforts to target the leading safety risks.

However, the report also suggests that FRA lacks performance measures that support effective assessment of the efficacy of its rail safety programs and it suggests that FRA could benefit from the implementation of an oversight approach that assesses how rail systems are addressing safety risks present throughout their extended systems.

I strongly believe that a critical component of any safety regime is a detailed performance measurement scheme that assesses the efficacy of that regime in terms of accidents prevented and lives saved. I believe future rail safety legislation should require the FRA to develop, utilize, and report on detailed performance measures.

I look forward to hearing from the witnesses that will come before the Subcommittee today and tomorrow their

assessments of current trends in the wide range of rail safety issues prevalent on our freight networks and their ideas for crafting safety regimes that will meet the challenges of our increasingly congested rail system.

Thank you and I yield back.

Testimony of Congressman Charles A. Gonzalez (TX-20)
Before the Subcommittee on Railroads Pipelines
and Hazardous Materials
House Committee on Transportation and Infrastructure
Hearing on Reauthorization of the Federal Rail Safety Program
Tuesday, January 30, 2007

Chairwoman Brown, Ranking Member Shuster, and Members of the Subcommittee, I thank you for the opportunity to testify today as you consider the reauthorization of the Federal Rail Safety Program, the first of several hearings this subcommittee will hold on rail safety related issues. My comments will focus on the matter of railroad safety in general.

Let me begin my remarks by stating that, while some progress has been made in recent years toward improving the level of safety with which our nation's rail system operates, much remains to be done in order to ensure that railroad accidents and incidents are minimized both in number and in the extent of damage they cause. My testimony today draws upon several examples from my home state of Texas that highlight the continuing need to improve the safety performance of our nation's railroads.

The Federal Railroad Administration (FRA) reports that, as of October 2006, the nation's rail system was on pace to set an annual safety record in terms of the number of railroad accidents per million train miles. The FRA and our country's

rail companies should be congratulated on their progress toward a better record of safety.

Despite this positive sign, however, a number of disturbing statistics in the same report reveal that we have a long way to go in preventing death and injury on the rails. In the first 10 months of last year, a total of 10,751 train-related accidents or incidents occurred in the U.S.[1] 2,361 of these were actual train accidents, primarily involving train collisions or train derailments. Another 2,364 of these wrecks involved highway-rail collisions. Finally, 6,026 "other incidents" occurred. The vast majority of fatalities in 2006 resulted from highway-rail collisions, or from other incidents—often involving trespassers on the rails. In fact, the number of fatalities due to train accidents, that is individuals riding trains and killed as a result of impact in a crash, was only one as of October of last year. Sadly, over seven hundred highway-rail, or other train-related incidents were fatal, resulting in a total of 756 deaths.

During the same period, 1,344 train-related accidents or incidents occurred in Texas. Of these, 94 occurred in Bexar County alone. Although rail transportation will always involve a level of risk to operators and to persons in close proximity to the tracks, the number and severity of rail accidents that occur on our nation's rail system must be reduced. The number of serious train accidents

[1] Rail safety statistics contained in this document provided by the Federal Railroad Administration, online at http://safetydata.fra.dot.gov

in or near my San Antonio area congressional district over the past few years clearly demonstrates the need for improved rail safety.

The most serious accident to occur in the past three years was one that occurred on June 18, 2004 in Macdona, TX, southwest of San Antonio. In this accident, a collision occurred between trains owned by Union Pacific Railroad (UP) and Burlington Northern & Santa Fe Railroad (BNSF). Forty cars derailed in the accident. Tragically, one of the cars carrying toxic chlorine gas ruptured. Exposure to the gas caused the death of the conductor on the train and of two residents living nearby the crash site. Fifty other people had to be hospitalized due to chlorine exposure. Many of these victims are still suffering from their injuries today.

A month prior to the deadly June 2004 derailment, a wreck near Brackenridge High School injured three and spilled 5,600 gallons of diesel fuel along the San Antonio River. It was only sheer luck that four tank cars carrying highly explosive propane did not derail. Just three months later, in September 2004, another accident occurred at the same location, this time without hazardous spills or injury. While I am thankful that these accidents were not worse, we must not resign ourselves to the powerless position of reliance upon chance in potentially deadly situations. The children at that San Antonio area school may not

be spared injury in a future accident, so we must do everything in our power to prevent it.

In November 2004, a mere five months after the fatal June 2004 accident, Bexar County was once again the site of a fatal train accident. This time, a Union Pacific train car collided with the Crystal Storage Company building on the east side of San Antonio. Significant damage was done to the building, but even more important, tragically, a man sitting at his desk inside the building was crushed between the train and the walls of the building and was killed.

All told, at least six major train-related accidents or incidents occurred in Bexar County in 2004. Four people died as a result of these incidents; many who were injured continue to suffer from their injuries today.

Moreover, on February 11, 2005, just 50 miles north of the City of San Antonio, the City of San Marcos was the victim of a seven car Union Pacific train derailment. A number of the cars were carrying hazardous materials, prompting the evacuation of 200 residents. Chance was again on our side as none of the cars ruptured, and no one was injured.

Last year, another major train derailment occurred near downtown San Antonio. On October 18, 2006, seventeen Union Pacific cars jumped the tracks. Miraculously, even though the accident occurred in a highly populated area of the

city, no serious injuries occurred. However, two homes were struck by derailed cars and were severely damaged.

Some of the outstanding safety issues, which, in my opinion, have not been adequately addressed over the years include, but are not limited to, the following:

- Employee fatigue
- The use of positive train controls
- Improved safety and security of remote control train operations
- Safety inspections of locomotives and the maintenance of tracks

It is well known that limits on an employee's hours of service are not enough to prevent employee fatigue, a concern that by the Federal Railroad Administration's own admission is a significant cause of train accidents. Not only should the hours of service an employee can legally work be re-examined, the scheduling of work shifts in such a way that the employee can get adequate rest also needs to be considered.

With respect to positive train controls, the National Transportation Safety Board (NTSB) has been calling for the use of positive train controls since 1990, when it was listed on the NTSB's Most Wanted List of Transportation Safety Improvements. Positive train controls are used in an effort to mitigate the severity of accidents caused by human factors. I understand that the FRA has recently announced that it has approved the first positive train control technology that

automatically controls speed and movements and is designed to avoid certain accidents. I applaud the FRA on their efforts and encourage them to continue to study the use of this technology and implement it where appropriate.

Another concern is the increased use of remote controlled locomotives. The use of remote controlled locomotives has been such a concern to 43 cities and 20 counties throughout the United States that they have passed resolutions regarding the use and safety of remote controlled locomotives in their localities. In fact, because of a fatal train accident involving the use of remote controls in Syracuse, New York in December 2006, the FRA has issued a series of recommendations to the railroad industry governing the use of remote control trains. However, history shows us that recommendations to the industry may not go far enough; actual regulations governing the use of remote control locomotives should be implemented and enforced.

Finally, the FRA must continue to ensure that the railroads are conducting the proper safety inspections, not only of the locomotives themselves, but also of the rail tracks, bridges and rail crossings. I was very concerned to hear that Union Pacific railroad recently applied to the FRA for a waiver of certain safety inspections for trains coming from Mexico into the United States. I made my opposition to this request quite clear in a January 10, 2007 letter to the FRA Administrator, Mr. Joseph Boardman. This request was also made in 2004, but the

FRA denied it. I was pleased to hear just last week that Union Pacific Railroad pulled its latest request for this waiver. Now is not the time to relax railroad safety standards and inspections. Rather, it is time to re-examine old ones, consider new safety regulations, and ensure that those in place are properly enforced.

Members of the Committee, my constituents in Bexar County and taxpayers across this nation deserve a safer rail system. The picture of rail safety presented to you here is one of tragedy, and one of narrow escapes. None of us can afford to sit idly by, hoping that a major train accident will not cause fatalities or injuries in our neighborhoods, especially when we know that there are outstanding safety precautions that have yet to be implemented. That is why I am pleased to appear before you today to share my experiences and concerns regarding rail safety. As you consider the reauthorization of the Federal Rail Safety Program, I urge you to focus not merely on the security aspects of the nation's rail system – the protection of these assets against attack - but also on the safety of the system that our constituents rely upon.

I sincerely appreciate the Member's interest in this subject and thank the Subcommittee for holding this extremely important hearing.

Statement of
Ranking Member John L. Mica
Committee on Transportation & Infrastructure

Subcommittee on Railroads, Hazardous Materials & Pipelines
Hearing On
Reauthorization of the Federal Rail Safety Program

Thank you, Mrs. Brown. I would like to join you in welcoming everyone to this first hearing of the Subcommittee on Railroads, Hazardous Materials and Pipelines.

The subject of today's hearing is reauthorization of the federal rail safety program. The Railroad Subcommittee conducted several safety oversight hearings during the last two Congresses and each time we have found that our rail safety program has made significant progress.

But there is always room for improvement. As we move forward to reauthorization, I would like to set out two important principles.

First, as Ronald Reagan often said, "If it ain't broke, don't fix it." Our current program has produced a remarkable increase in safety over the years.

If we propose to try something new, let's be certain it is going to work.

Any new program must be based on the latest science. The Federal Railroad Administration has done a great deal of safety research over the past few years, particularly on worker fatigue. This research could serve as the basis for replacement of our antiquated Hours of Service Law which dates back to 1907.

My second principle for rail safety reauthorization is the avoidance of unnecessary new bureaucratic regulations.

The government is great at making people file more and more paperwork, but paperwork does not enhance safety.

What we truly need is a program to fund advanced safety technologies, such as the T-18 Track Inspection car developed by the FRA. We should also be encouraging the installation of state-of-the-art positive train control systems, which can eliminate human-caused collisions.

In closing, I would also like to note that one of the worst run railroads in the country is our own Amtrak.

During our Committee oversight process last year, we found numerous safety, mismanagement, and maintenance problems in Amtrak's mechanical department. Some of these issues have been addressed, but Amtrak needs to do more.

I should note that my staff has spoken to Amtrak President Alexander Kummant and have been assured that Amtrak will address pending safety concerns.

I call upon the Federal Railroad Administration to take a closer look at Amtrak's safety record to insure that it has taken every possible corrective action.

Thank you.

STATEMENT OF
THE HONORABLE JAMES L. OBERSTAR
SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS
HEARING ON
"REAUTHORIZATION OF THE FEDERAL RAIL SAFETY PROGRAM"
JANUARY 30-31, 2007

I am pleased to be here today at the first meeting of the Subcommittee on Railroads, Pipelines, and Hazardous Materials. It is appropriate that the first meeting of the subcommittee is focused on reauthorizing the Federal rail safety program, which is long overdue. Congress last reauthorized the Federal Railroad Administration (FRA) in 1994; the authorization expired in 1998.

Although the overall safety record of the railroad industry has improved since it was partially deregulated in 1980, there has been little or no overall improvement over the past decade. Serious accidents resulting in injuries, deaths, and property damages continue to occur at an alarming rate.

According to the FRA, 40 percent of all train accidents are the result of human factors; one in four of those accidents result from fatigue. Fatigue is sometimes called the "silent killer." It works its way into every action that a pilot, driver, or railroad engineer takes. It weakens the senses, slows reaction times, and makes it impossible for a person to function.

I recall working the "graveyard shift" in the iron ore mines when I was in college. At 2 a.m. one night, I was sampling ore on the top of a railroad car. I was tired. The rocks slid out from under me and I fell 15 feet from the top of the car and landed between the tracks. I missed hitting my head on a railroad tie by a matter of inches. If I had hit my head on that tie and been killed, no one would have known the true cause of my death. They would have thought I was careless, or that it was just an accident. Fatigue would have never been ruled the cause of death because fatigue leaves no fingerprints, and it does not show up in blood tests or autopsies.

The FRA has launched a number of initiatives focused on reducing accidents caused by fatigue and other human factors. I appreciate the FRA's hard work in this area, but the FRA can only do so much when it comes to fatigue. The FRA is the only agency within the Department of Transportation (DOT) that does not have the regulatory authority to address hours of service. The hours of service rules can only be changed by statute.

Despite widespread agreement that these rules are antiquated and in need of updating, it has been almost 40 years since substantial changes to the law have been made. In previous Congresses, I introduced legislation to strengthen hours of service. The railroads fought against it, stating that hours of service should be dealt with at the collective bargaining table. I believe that the safety of railroad workers and the safety

of the general public, which all too often are the victims in these train accidents, should not be relegated to a negotiation between management and labor. This Congress has a responsibility to prevent fatigue, and I intend to address that in any reauthorization bill that is considered by this Committee.

We also need to consider improvements to the FRA's inspection and enforcement program. The FRA relies on 421 Federal inspectors and 160 State inspectors to monitor the railroads' compliance with federally mandated safety standards. The shear magnitude of the U.S. railroad system, however, limits the FRA's ability to inspect each railroad's operations and investigate each accident that occurs.

According to the Government Accountability Office, the FRA is able to inspect only two-tenths of one percent of railroad operations each year. Additionally, the DOT's Inspector General reports that the FRA investigates only a small number of accidents; for example, from 2000 through 2004, FRA investigated only 13 percent of the most serious grade crossing collisions that occurred.

Compare this to the Federal Aviation Administration (FAA): In 2004, the FAA conducted on-site investigations of 1,392, or 93 percent, of the 1,484 general aviation accidents that the FAA had responsibility for investigating in 2004. Unlike the FRA,

however, the FAA has an Office of Accident Investigations staffed with 8 full-time investigators whose mission is to detect unsafe conditions and trends and to coordinate the process for corrective actions. In addition, the FAA uses personnel from other disciplines to conduct investigations, including 2,989 inspectors from its Office of Aviation Safety.

We ought to look at increasing the number of inspectors at the FRA, and ensuring that they are not only conducting direct inspections of individual railroads and properties, but also focused on preventing systemic railroad safety problems. We also need to look at the fines and penalties that are issued to ensure that they are proper deterrents to violating Federal rail safety regulations.

These are just a few issues I would like to explore in the context of an FRA reauthorization bill. I am interested in hearing from the witnesses what other issues should be considered, including strengthening safety at our Nation's grade crossings and ensuring that rail accident victims are able to obtain relief for injuries or damages caused by railroad negligence.

I yield back the balance of my time.

Before the Transportation and Infrastructure Committee
Subcommittee on Railroads, Pipelines, and Hazardous Materials
U.S. House of Representatives

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Reauthorization of the Federal Railroad Safety Program

Statement of
The Honorable Calvin L. Scovel III
Inspector General
U.S. Department of Transportation

Chairwoman Brown, Ranking Member Shuster, and Members of the Subcommittee:

We appreciate the opportunity to testify today on the reauthorization of the Federal Railroad Safety Program. We commend this Subcommittee for its continued work in improving railroad safety. Improvements in safety are important because railroads employ about 232,000 workers and use over 173,000 miles of track in operations that affect the lives of millions of Americans. In 2005, railroads traversed 790 million train miles, up 18 percent since 1996. This impact will grow substantially in the future. While railroads today transport about 42 percent of the Nation's freight, the Department estimates that between 1998 and 2020 the amount of freight transported by rail will increase by about 50 percent.

In addition, nearly 1.7 million carloads of hazardous materials[1] are transported by rail in the United States each year. Although the industry's record for transporting hazardous materials has been good, the catastrophic consequences that can arise from the release of hazardous materials from rail cars are a significant safety issue. From 2003 through 2006, the railroads reported 145 rail incidents that involved hazardous materials, resulting in 19 fatalities and 423 injuries. Although these numbers, on their face, are not large, these incidents resulted in the evacuation of 17,384 people from their homes and businesses, caused at least $17 million in track damages, and resulted in about $71 million in equipment damages.

As we reported in our FY 2007 Top Management Challenges issued to the Department,[2] the Federal Railroad Administration (FRA) must continue implementing its safety initiatives since train accidents are still on the rise overall. As the FRA Administrator noted before this Subcommittee in June 2006, the rail industry's safety record has improved, but significant train accidents continue to occur and the train accident rate has not shown substantive improvement in recent years. To illustrate, even though in 2005 the number of train accidents decreased by 4 percent and the rate of train accidents per million train-miles traveled decreased by 7 percent, the overall data for 1995 through 2005 show that train accidents increased by 31 percent and the rate of train accidents grew by 11 percent (see Attachment 1).

Our body of work on FRA's oversight programs has found grade-crossing safety to be a "centerpiece" of rail safety. The second highest percentage of train accident *fatalities*—42 percent from 1995 through 2005—is due to collisions at

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[1] The Department has classified about 3,500 materials as hazardous, ranging from mild irritants to poisonous and radioactive materials.

[2] OIG Report No. PT-2007-004, "Top Management Challenges," November 15, 2006. OIG reports can be accessed on the web at *www.oig.dot.gov*.

grade crossings.[3] During this 10-year period, collisions and fatalities at grade crossings were significantly reduced, by 39 percent and 38 percent, respectively. Most recently, however, these numbers have increased. From 2003 to 2005, collisions rose by 2 percent and the number of fatalities jumped by 7 percent.

We issued reports in 1999[4] and 2004[5] on grade crossing safety, and in July 2005, we presented testimony before this Subcommittee.[6] We also issued an audit report to FRA in November 2005[7] and plan to issue a fourth report next month on FRA's activities to oversee safety at the Nation's grade crossings. Chairwoman Brown, our testimony today will draw from the body of work we conducted over the last several years on rail safety.

Today, I want to focus on two issues that we see as key for the reauthorization of the FRA rail safety program: (1) improving grade crossing safety through better compliance with safety regulations and by working with states and (2) identifying safety trends through data analysis.

Grade crossing safety can be improved by ensuring compliance with FRA reporting requirements and by working with states to address problems, such as sight obstructions at grade crossings. On average, one person dies and three people are injured in the United States every day in grade crossing collisions. During the course of our work, we have reviewed two of FRA's reporting requirements related to grade crossing collisions.

The first requirement is that railroads immediately call the National Response Center[8] (NRC) to report serious grade crossing collisions.[9] (The National Transportation Safety Board defines "immediately" as within 2 hours.) This is a critical mechanism to help FRA determine whether a Federal investigation is

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[3] Trespassing fatalities is the leading category of rail-related fatalities for that period, accounting for 52 percent. Our 1999 report discusses the challenge of reducing trespassing fatalities (OIG Report No. RT-1999-140, Report on Rail-Highway Grade Crossing Safety, September 30, 1999). In terms of safety improvements and fatality reductions, the potential for the greatest impact would come from improving grade crossing safety since trespassing is a difficult behavior to address.

[4] OIG Report No. RT-1999-140, "Rail-Highway Grade Crossing Safety," September 30, 1999.

[5] OIG Report No. MH-2004-065, "Audit of Oversight of Highway-Rail Grade Crossing Safety Program," June 16, 2004.

[6] OIG Testimony, CC-2005-060, "Highway-Railroad Grade Crossing Safety Issues," July 21, 2005.

[7] OIG Report No. MH-2006-016, "Audit of Oversight of Highway-Rail Grade Crossing Accident Reporting, Investigations, and Safety Regulations," November 28, 2005.

[8] As part of the Department of Homeland Security, NRC is the Federal Government's 24-hour point of contact for environmental discharges anywhere in the United States and its territories. In addition, through agreements containing criteria that serve as triggers for reporting, NRC notifies FRA and other Federal agencies of fatal train accidents and grade crossing collisions.

[9] Under FRA's criteria for immediately reporting to NRC, serious grade crossing collisions are train accidents or incidents at crossings that result in one fatality and/or five or more injuries.

needed at the accident scene. We reported in November 2005 that between May 1, 2003 and December 31, 2004 railroads failed to notify NRC immediately in 21 percent of reportable grade crossing collisions as required, most involving fatalities or multiple injuries.

The second requirement is that railroads report every grade crossing collision to FRA within 30 days of the end of the month in which the collision occurred. Timely and accurate reporting of grade crossing collisions serves the important purpose of ensuring that railroad inspections are properly targeted. Our work identified 12 railroads between 1999 and 2004 that did not report 139 collisions to FRA on time, with some being reported nearly 3 years late. These collisions resulted in 2 fatalities and 20 injuries, as ultimately reported by the railroads. Although these numbers are not large, FRA does not routinely review grade crossing collision records maintained by the railroads to ensure compliance with its reporting requirements. We found that FRA does not know whether the 15,406 grade crossing collisions reported by railroads from 2001 through 2005 include all collisions that occurred during those years. We also found that FRA investigated less than 1 percent of all grade crossing collisions from 2000 through 2004.

In the report we plan to issue next month, we will recommend, among other actions, that FRA issue a violation every time a railroad does not report a grade crossing collision in accordance with Federal requirements. A violation notice triggers the assessment of civil penalties, and railroads that repeatedly fail to report accidents appropriately should receive higher penalties.

Further, 27 states currently lack state-level laws addressing grade crossing safety. For those states, our ongoing work points to the immediate safety benefits to be achieved if FRA were to promote the establishment of state laws addressing sight obstructions, such as overgrown vegetation and structures that block pedestrians and motorists' view of approaching trains. At the national level, voluntary guidelines exist, but they are not enough. FRA should collaborate with the Federal Highway Administration and the American Association of State Highway and Transportation Officials to issue mandatory national standards for maintaining sight distances at grade crossings.

FRA must aggressively implement its data-driven approach and trend identification. Our audit results since 1998 have repeatedly shown that FRA must make greater use of data analysis to help target its regulations and oversight on problem areas—a proactive rather than reactive strategy. Such an approach would aid in identifying some of the most prevalent causes of train accidents and enable FRA to devise corrective measures. Our ongoing analyses show that human

factors and track problems were responsible for 72 percent of the train accidents that occurred from 1996 through 2005.

By using trend analysis to track predictive indicators in problem areas, FRA could identify potential safety "hot spots." For example, circumstances related to the January 6, 2005, Norfolk Southern Railway accident in Graniteville, South Carolina, both illustrate and underscore the value of trend analysis. Even though FRA began issuing safety advisories within 5 days after this accident, this was a reactive measure. Had FRA used the data it already had—that switch problems started trending up in 1997 and took a large jump in 2003—it could have addressed these problems years before the accident occurred. FRA must continue to implement and refine its data-driven approach, so that empirical data can be used to target inspection and enforcement activities where they are most needed.

In February 2005, we recommended a more data-driven approach in our report to the Secretary and Acting FRA Administrator on our review of FRA's safety enforcement data. In May 2005, FRA responded to our recommendation and launched its National Inspection Plan. The Plan uses predictive indicators to assist FRA in allocating inspection and enforcement activities within a given region by railroad and by state. This is a step in the right direction for FRA. It is too soon, however, to tell exactly how effective these measures will be in the long term. We plan to revisit FRA's progress as it continues to implement its National Inspection Plan.

I would now like to discuss these issues in further detail.

FRA Must Continue To Focus its Grade Crossing Oversight Activities on Further Reducing Collisions and Fatalities

Although significant progress was made over the last decade—1995 to 2005—grade crossing collision statistics increased from 2003 to 2005. During the latter period, collisions rose from 2,977 to 3,041 (2 percent) and the number of fatalities increased from 334 to 357 (7 percent), with 2004 higher than 2005. These increases and the upward trend in the volume of train and highway traffic indicate that more must be done at the Federal and state level to improve grade crossing safety. Our body of work on grade crossing safety has shown the need for FRA to develop more focused strategies to further reduce collisions and fatalities.

Ensure compliance with reporting requirements. We reviewed two of FRA's reporting requirements. The first is that railroads immediately call the National Response Center to report serious grade crossing collisions. Immediate notification is necessary so that FRA can determine whether a Federal investigation is needed at the collision scene. In November 2005, we reported on the need for FRA to clarify its requirement that railroads immediately call the

National Response Center to report grade crossing collisions that result in fatalities and multiple injuries. Specifically, we found that 21 percent of serious crossing collisions were not reported at all, let alone in a timely way. Our analysis showed that 115 of the 543 serious grade crossing collisions that occurred between May 1, 2003 and December 31, 2004 should have been reported to the National Response Center, but were not in its database.

To its credit, FRA implemented a process to reconcile reporting of fatal and other serious grade crossing collisions to the National Response Center. We recommended that FRA compare the grade crossing collision reports submitted monthly to its database with those reported to the National Response Center and assess and collect civil penalties when railroads fail to report to the National Response Center.

The second requirement is that railroads report all grade crossing collisions to FRA within 30 days of the end of the month in which the collision occurred. Complete information on grade crossing collisions is important to state transportation officials when spending Federal funds for grade crossing safety improvements.[10] For example, after five unreported grade crossing collisions in Iowa were finally submitted to FRA, the Iowa Department of Transportation used the information provided by the railroads as the basis for allocating funds for safety improvements at two of the five grade crossings.

Our ongoing work continues to identify problems with the completeness of FRA's accident reporting system. We found that railroads are not providing timely written reports to FRA for all grade crossing collisions. Specifically, our work identified 12 railroads between 1999 and 2004 that did not report 139 collisions to FRA on time, with some being reported nearly 3 years late. Although these numbers are not large, FRA does not know whether all collision reports have been submitted, as required, because it has not routinely reviewed the grade crossing collision records maintained by the railroads to ensure compliance with its reporting requirements.

FRA's oversight activities should include periodic reviews of the records maintained by the railroads to ensure that all grade crossing collisions are reported to its accident reporting system in a timely manner. Further, by ensuring that accurate and complete reports are submitted in a timely manner for all grade crossing collisions, FRA and states will have access to accurate data for identifying dangerous grade crossings and emerging accident trends. This is

[10] FRA oversees rail safety and FHWA provides funding to states for grade crossing safety improvements under Title 23, USC, Section 130, but the responsibility for improving grade crossings and eliminating hazards rests primarily with the states.

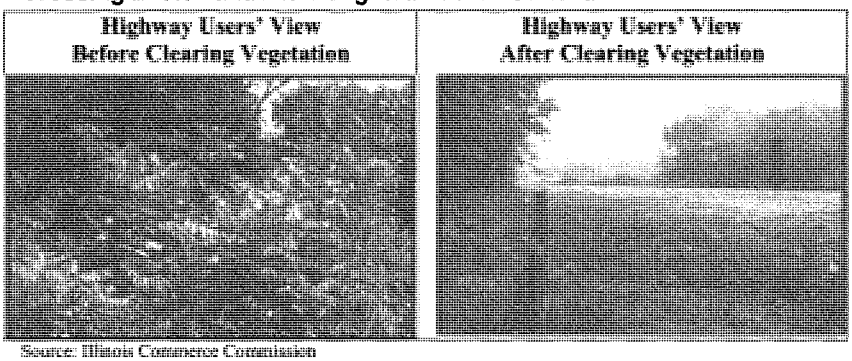
clearly an area where additional enforcement and civil penalties should be considered.

Develop strategies to increase FRA's involvement in grade crossing collision investigations. In our November 2005 report, we also found that FRA should develop strategies to increase its effort to investigate grade crossing collisions. From 2000 through 2004, FRA investigated less than 1 percent of all train accidents and grade crossing collisions. During the same time period, FRA investigated only 5 percent of the crossing collisions reported to the National Response Center. Instead, it relied heavily on accident reports received from the railroads to evaluate the circumstances, probable causes, and responsible parties for most crossing collisions. Further, FRA did not broaden its review of those collisions by verifying the causes through routine review of independent sources of information, such as police reports or locomotive event recorder data.

With a current inspector workforce of 385, of which 62 are assigned to inspect signal and train control devices, FRA has a limited capability to investigate the approximately 3,000 crossing collisions that occur each year. In our November 2005 report, we recommended that FRA use a pilot program to collect and analyze independent information on crossing collisions obtained from railroads (including event recorder data and collision reports) and local or state law enforcement agencies. FRA concurred and initiated its pilot study in 2006. FRA should report the results of this study as soon as possible.

Work with the states to establish laws to address sight obstructions. We found that greater attention is needed to ensure that highway users have a full view of approaching trains at the Nation's grade crossings. When grade crossings are not protected by automated warning devices, it is imperative that highway users have a clear view of approaching trains in order to determine when it is safe to cross. As illustrated in Figure 1 on page 7, vegetation growth at grade crossings can significantly reduce a motorist's ability to see the track and any approaching trains.

Figure 1. Photographs of Highway Users' Sight Distances at a Grade Crossing Before and After Vegetation Was Cleared



Source: Illinois Commerce Commission

Based on FRA's data, sight obstructions can be a contributing factor in grade crossing collisions. Of the 15,406 grade crossing reports submitted by the railroads from 2001 through 2005, 688 noted a sight obstruction, such as standing railroad equipment and overgrown vegetation.[11]

Mandatory national standards have not been established to maintain sight distances at the nearly 76,000 public grade crossings that are not protected with automated warning devices. Twenty-three states have passed laws for maintaining sight distances at grade crossings, but the majority of states have no laws. In those states without laws, highway users must rely on sight distances at grade crossings established by a combination of (1) voluntary guidance from the Federal Highway Administration (FHWA) and the American Association of State Highway and Transportation Officials and (2) the policies and practices implemented by individual railroad companies.

Since 27 states currently lack any state laws to address grade crossing safety, more needs to be done. For those states, our ongoing work points to the immediate safety benefits to be achieved if FRA were to promote the establishment of state laws addressing sight obstructions, such as overgrown vegetation and structures that block pedestrians and motorists' view of approaching trains. At the national level, voluntary guidelines exist, but they are not enough. FRA should collaborate with the Federal Highway Administration and the American Association of State

[11] FRA's grade crossing accident report requires the railroads to document the conditions at the accident scene. The report does not require the railroads to identify a primary or secondary cause.

Highway and Transportation Officials to issue mandatory national standards for maintaining sight distances at grade crossings.

Establish reporting requirements for FRA's national grade crossing inventory system. Accurate and complete inventory data on the characteristics[12] of all grade crossings, public and private, are needed to further improve safety. In our June 2004 report on the Highway-Rail Grade Crossing Safety Program, we recommended that FRA establish mandatory reporting requirements for railroads and states through rulemaking or legislation to improve the accuracy and completeness of its national grade crossing inventory data. These data are used by state officials to develop priority listings of crossings that need safety improvements because they have a high probability of collisions. Although both FRA and FHWA have made efforts to improve the voluntary reporting of grade crossing inventory information to FRA's national database, reporting requirements have not been established. According to FRA, 32 percent of the private crossing records in the national inventory database have not been updated since 2001, and 21 percent of the private crossing records have never been updated.

Mandatory reporting is even more important under the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which changed the apportionment procedures for Section 130[13] funds. SAFETEA-LU requires 50 percent of the $220 million authorized to be apportioned to the states for grade crossing safety improvements based on a ratio of the number of public grade crossings in a state to the total number of public crossings nationwide.

Require states with the most dangerous grade crossings to develop an action plan. In our June 2004 report that assessed the Highway-Rail Grade Crossing Safety Program, we recommended that FRA identify the states that have the most grade crossing accidents year after year, particularly at crossings that have experienced multiple accidents. We also recommended that FRA work with each of these states to develop an action plan that identifies specific solutions for improving safety at those crossings that continue to have accidents. FRA agreed and in March 2006 completed work with the Louisiana Department of Transportation and Development on the first such state action plan.

In developing Louisiana's action plan, FRA's grade crossing accident data were analyzed to identify public grade crossings with multiple collisions from 1999

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[12] Inventory data on the characteristics of grade crossings include a combination of active warning devices, passive warnings, or both. Typically, active warning devices consist of automatic gates, flashing lights, and highway traffic signs. Passive warnings are primarily crossbucks, stop signs, advanced warning signs, and pavement markings.

[13] The Department provides set-aside funding to states for grade crossing safety improvements, primarily through FHWA, under Title 23, USC, Section 130.

through 2004. This analysis identified 177 public grade crossings that accounted for 432 collisions during this period. These 432 collisions were analyzed and several safety focus areas were identified: the majority of collisions occurred in only 16 of the 64 Parishes in Louisiana, and 85 percent of collisions occurred at grade crossings without automatic gates. Louisiana transportation officials took actions to improve safety at 130 of the 177 crossings that experienced multiple collisions. Four were closed, 50 were equipped with gates, 61 were equipped with flashing lights, and 15 were scheduled to receive other safety improvements in 2006.

FRA should move forward by initiating individual action plans for those states that continue to have the highest number of grade crossing collisions, as we recommended in our 2004 report (see Attachment 2 for a list of our recommendations since 2003).

FRA Must Aggressively Implement its Data-Driven Approach and Trend Identification

Our audit results since 1998 have repeatedly shown that FRA would benefit from an inspection program that places substantially greater emphasis on data analysis to target its inspection resources—a proactive rather than reactive strategy. Such an approach would aid in identifying some of the most prevalent causes of train accidents and enable FRA to devise corrective measures. Our ongoing analyses show that human factors and track problems were responsible for 72 percent of the train accidents that occurred from 1996 through 2005. By using trend analysis to track predictive indicators in problem areas, FRA could identify potential safety "hot spots." A number of predictive indicators could yield beneficial preventive measures, including improperly lined switches and unusually high "defect ratios" resulting from safety inspections.[14]

In February 2005, we reported that FRA's inspection program was structured to function in a manner that was (a) discretionary with individual inspectors in regard to routine inspections and (b) reactive in terms of how it conducted focused inspections. Currently, 385 inspectors oversee the Nation's vast network of train miles. It is critical that FRA's limited inspection and enforcement resources be carefully targeted to address those safety problems most likely to result in accidents and injuries.

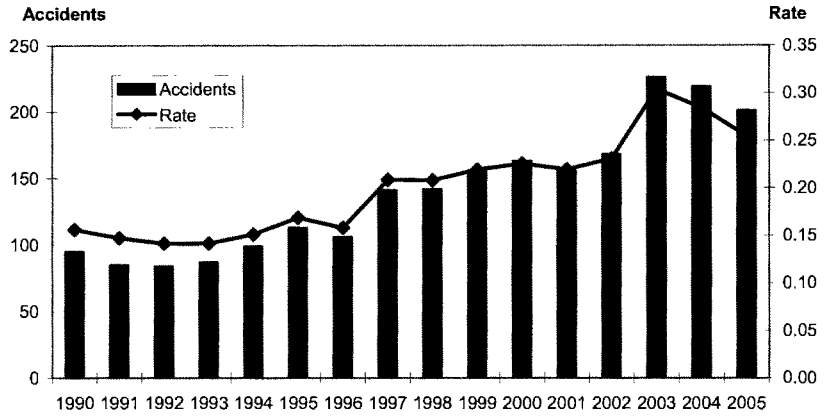
In our February 2005 report, we recommended that targeting be achieved through systematic use of trend analysis, along with other data analysis tools, to examine key indicators of a railroad's safety condition (for example, its accident rate, defect ratio, and employee injury statistics). FRA would benefit from a data-

[14] A defect ratio is a measure of noncompliance and is expressed as a percentage of units inspected.

driven inspection program that makes substantially greater use of objective analysis of empirical data and metrics to target its inspection and enforcement activities. This approach would enable FRA to better allocate its inspection resources and decide appropriate levels of enforcement.

The value of trend analysis—a key to proactive action. Circumstances related to the January 6, 2005 Norfolk Southern Railway accident in Graniteville, South Carolina, both illustrate and underscore the value of trend analysis. Within 5 days after the accident, FRA issued a safety advisory to all railroads concerning improperly lined switches stating, "An improperly lined switch invites disaster and can be easily avoided.[15] All railroads need to adopt the safety measures outlined in this advisory." Trend analysis of rail safety data identifies improperly lined switches as the second leading cause of railroad accidents in general, and the leading cause of accidents resulting from human error. Figure 2 below shows a clear upward trend from 1997 through 2005 in the number and rate of accidents attributed to improperly lined switches.

Figure 2. Number and Rate (Per Million Train Miles) of Railroad Accidents Caused by Improperly Lined Switches



Source: OIG Analysis of FRA Data

The chart also shows that the upward trend of improperly lined switches started in 1997 and took a large jump in 2003—2 years before the Graniteville accident occurred. By analyzing its data, FRA will be able to conduct predictive analyses

[15] FRA Notice of Safety Advisory 2005-01, "Position of Switches in Non-Signaled Territory," January 11, 2005.

and identify early indicators of problems, such as improperly lined switches, and order corrective action *before* accidents occur.

Defect ratios—a key indicator of a railroad's safety that should he used to better target inspections. Defect ratios should be a key factor in determining the number of inspections that railroads receive, but we still see a gap between defect ratios and average inspections. Our 2005 review looked at several rail safety metrics and found that one—safety enforcement data—showed that serious safety problems have long existed for all four major railroads. For example, Union Pacific had the highest average number of train accidents (weighted per million train miles) of the four major railroads during Calendar Years (CYs) 1998-2000 and CYs 2001-2003. Yet, Union Pacific had been inspected proportionally less, ranking third in FRA inspections per million train miles between those periods. This is demonstrated in Figures 3 and 4 below.

Figure 3. Average Defect Ratios
(Instances of Non-Compliance with FRA Standards Per Units Inspected)

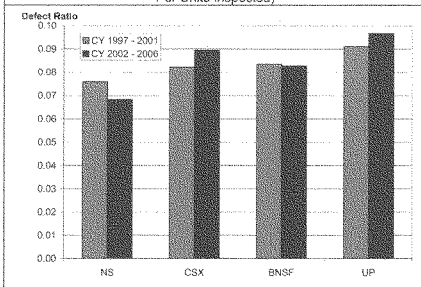
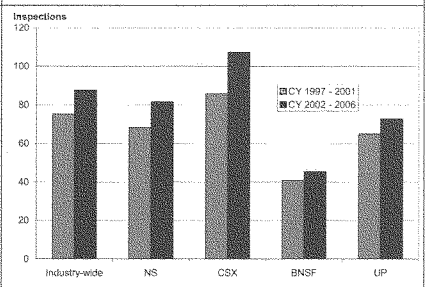


Figure 4. Average Inspections
(Per Million Train Miles)



Legend: **Norfolk Southern Corporation (NS)**
CSX Transportation (CSX)
Burlington Northern Santa Fe Railway Company (BNSF)
Union Pacific Railroad Company (UP)

Source: OIG Analysis of FRA Data

We find it counterintuitive that the railroad with the *most track miles* and the *worst accident rate and defect ratio* would be inspected at a lower rate than two of the three other major railroads that had fewer miles and better rates. Trend analysis leading to the targeting of resources on high-risk areas is particularly critical, because FRA inspection resources are limited.

FRA has taken steps to address the problem. FRA has been responsive to our 2005 recommendations to implement a data-driven approach. Specifically, we recommended that FRA submit to the Secretary a comprehensive plan for implementing a fully functioning program that makes meaningful use of analysis of available safety, inspection, and enforcement data. As noted by the FRA Administrator in his June 2006 testimony:

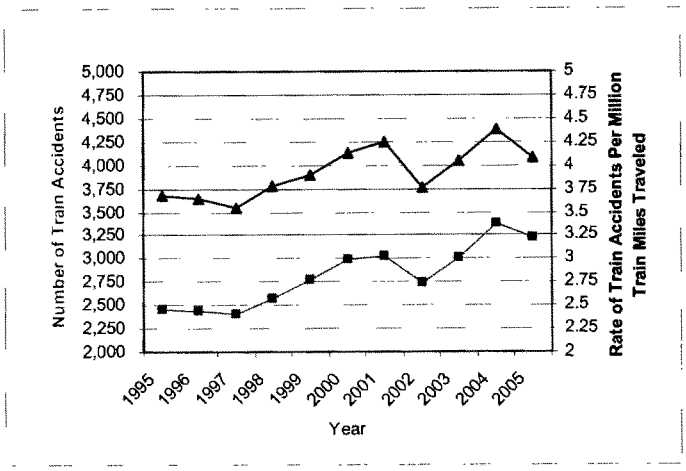
> FRA continually seeks ways to direct its inspection and enforcement efforts toward the issues and locations most in need of attention. To this end, FRA instituted the National Inspection Plan (NIP), an inspection and allocation program that uses predictive indicators to assist FRA in allocating inspection and enforcement activities within a given region by railroad and by State.

This is a step in the right direction for FRA, but since the Plan was implemented only in March 2006, it is too soon to tell exactly how effective these measures will be in the long term.

This concludes my statement. I would be pleased to answer any questions.

Attachment 1

Number and Rate of Train Accidents 1995 through 2005



Source: FRA

Attachment 2

Status of OIG Audit Recommendations to FRA
Calendar Years 2003 through 2006

Date	Title/Report No.	Recommendation(s)	Status
December 10, 2003	Review of Slow Orders and Track Reclassification, MH-2004-007	1. Review CSX ballast replacement practices, and follow up on ballast deficiencies noted during previous FRA safety audits and inspections.	1. Closed. In response to our audit, FRA began efforts to review CSX ballast practices.
		2. Monitor railroad R-1 reports on a continuous basis to identify potential problems in roadway investment, such as ballast, and use the information to target safety inspections on individual railroads.	2. Closed. In response to our audit, FRA began monitoring railroad R-1 reports to identify potential problems in roadway investment.
June 16, 2004	Audit of the Highway-Rail Grade Crossing Safety Program, MH-2004-065	3. Identify the states with the most dangerous grade crossings and require each of these states to develop an action plan that identifies specific solutions for improving safety at these crossings.	3. Open. Although FRA completed a state action plan with the Louisiana Department of Transportation and Development in March 2006, this recommendation has not been fully implemented. FRA must provide the OIG with a list of the states developing state action plans and the target dates for implementing them.
		4. Encourage states to increase safety awareness through educational programs, develop legislation to modify risky driver behavior through photo enforcement, and increase traffic enforcement strategies.	4. Open. The 2004 Grade Crossing Action Plan includes initiatives to expand education outreach by adapting traditional outreach techniques and energizing enforcement by expanding on successful programs with law enforcement agencies and the judicial branch. To close this recommendation, FRA must provide us written documentation on the actions it has taken to implement this recommendation. We also request that FRA provide us information on the states that have adopted new strategies, what those strategies were, and when they were implemented.

Date	Title/Report No.	Recommendation(s)	Status
		5. Encourage states to set annual goals for closing grade crossings and strengthen their financial incentives to local governments for closures.	5. Open. The 2004 Grade Crossing Action Plan includes an initiative to close unneeded crossings. To close this recommendation, FRA must identify the states that have developed annual goals for closing crossings, and determine which states have been successful in implementing financial incentives for closing crossings.
		6. Identify a method for including the Federal Transit Administration's (FTA) data on light and heavy *rail transit* crossing accidents and fatalities in the new action plan's goals and statistics.	6. Open. The 2004 Grade Crossing Action Plan did not discuss including light and heavy *rail transit* incidents with other grade crossing collision data. In April 2005, FRA and FTA informed the OIG that their administrations had jointly posted annual grade crossing incidents, injuries, and fatalities on FRA's website to address our recommendation. However, our review of FRA's website shows that the data has not been updated since July 18, 2005.
		7. Promote reporting requirements for railroads and states through rulemaking or legislation.	7. Open. Although both FRA and FHWA have made efforts to improve the voluntary reporting of grade crossing inventory information to FRA's national database, reporting requirements have not been established. To close this recommendation, FRA must issue a rule or obtain legislative approval from Congress for requiring reporting of grade crossing inventory data.
		8. Ensure that states comply with the annual reporting requirement for their Section 130 fund expenditures.	8. Closed. FHWA sent a letter to the states on September 30, 2004, advising them of the annual requirement to submit evaluation reports on their progress in implementing the highway-rail crossing program, as required under 23 USC 130. After a review of FHWA documents, we found that 38 states submitted their 2005 reports, which was a significant improvement from what we reported in June 2004. In 2006, 45 states and the District of Columbia complied with this annual reporting requirement.
November 28, 2005	Audit of Oversight of Highway-Rail Grade Crossing Accident Reporting, Investigations, and Safety	9. Require the railroads to report any grade crossing collision to NRC that results in a fatality at the scene or death within 24 hours of the accident.	9. Open. FRA plans to clarify its NRC reporting requirements, to include the immediate reporting of any grade crossing collision that results in a fatality at the scene or death within 24 hours of the accident. To close this recommendation, FRA must publish new reporting requirements in the Federal Register for Title 49, Part 225.9 of the Code of Federal Regulations.

Date	Title/Report No.	Recommendation(s)	Status
	Regulations, MH-2006-016	10. Continue monthly reconciliation of the FRA database with NRC records and strongly enforce requirements to report to the NRC by assessing civil penalties.	10. Closed. FRA has continued its monthly reconciliation of the FRA database with NRC records. FRA has also started assessing fines against the railroads for failing to comply with the reporting requirement.
		11. Using a pilot program, collect and analyze independent information on crossing collisions to evaluate the causes of collisions, types of warnings in place, and railroads' compliance with Federal safety regulations.	11. Open. FRA is conducting a pilot study to verify the accuracy of the railroads' grade crossing collision reports by comparing these reports to state and local police reports. FRA's Office of Safety will monitor the progress of this pilot study and determine whether the findings support a broader application of the program.
		12. Increase enforcement of existing safety regulations against railroads by recommending more violations and more civil penalties.	12. Open. In May 2005, the Secretary announced a National Rail Safety Action Plan, which included an initiative to implement a National Inspection Plan. In March 2006, FRA completed its application of this plan to all the FRA inspection disciplines. Once the National Inspection Plan has taken its full effect, FRA expects a reduction in both the number and rate of train accidents.

Transportation and Infrastructure Committee
Subcommittee on Railroads, Pipelines, and Hazardous Materials
U.S. House of Representatives

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Reauthorization of the Federal Railroad Safety Program

Questions for the Record

The Honorable Calvin L. Scovel III
Inspector General
U.S. Department of Transportation

On January 30, 2007, the House Subcommittee on Railroads, Pipelines, and Hazardous Materials held a hearing on the "Reauthorization of the Federal Rail Safety Program." Subsequently, on February 26, 2007, Chairwoman Corrine Brown requested that the Office of Inspector General (OIG) provide answers to nine additional rail safety questions for the record. Our answers to Chairwoman Brown's questions are presented below.

1. **Mr. Scovel, you reported in November 2005 that the railroads failed to immediately notify the National Response Center of 21 percent of reportable grade crossing collisions as required. I know that the FRA has taken measures to improve the information contained in its database, but what more needs to be done? You only looked at grade crossing collisions, is it reasonable to assume that there is underreporting across all accidents and incidents?**

   Chairwoman Brown, you are correct. In our November 2005 report,[1] we found that six large railroads and several smaller ones failed to immediately notify the National Response Center (NRC) by telephone of reportable grade crossing collisions. From May 1, 2003 through December 31, 2004, 115 of 543, or 21 percent, of reportable grade crossing collisions were not reported to NRC. These unreported collisions involved 116 fatalities. To address this problem, in July 2004, FRA began reconciling its database with the NRC to identify grade crossing collisions that had never been telephonically reported to NRC. In March 2005, FRA officials began issuing violations to railroads that failed to follow FRA's criteria for reporting grade crossing collisions to NRC. This enforcement effort needs to be sustained to ensure that railroads properly report all grade crossing collisions involving a fatality, serious injury, or substantial property damage.

   We also found that FRA could do more to ensure the accuracy of information reported to NRC. In 2005, we recommended that FRA clarify its criteria for reporting grade crossing collisions to NRC by requiring the railroads to report any crossing collision that results in a fatality at the scene or death within 24 hours of the collision. FRA officials told us that the underreporting of grade crossing collisions was attributable largely to injured highway users dying after they were transported from the grade crossing collision scene. FRA officials also stated that railroad employees were confused about which collisions to report to NRC and their confusion contributed to missed reports. We found the reporting requirements to be complex and potentially confusing as well. In our opinion, to avoid confusion over the reporting requirements for railroads, FRA must clarify its

[1] OIG Report No. MH-2006-016, "Audit of Oversight of Highway-Rail Grade Crossing Accident Reporting, Investigations, and Safety Regulations," November 28, 2005.

requirements for reporting grade crossing collisions to NRC. Although FRA agreed to implement our recommendation, as of March 1, 2007, the requirements for telephonic reporting of certain grade crossing collisions to NRC (Code of Federal Regulations, Title 49, Part 225.9) had not been clarified by including new criteria that require railroads to report to NRC any death that occurs within 24 hours of a grade crossing collision.

Regarding your question about underreporting across all train accidents and rail incidents, FRA established ten different criteria for immediately reporting railroad accidents to NRC—some criteria apply to any train accident and others apply only to grade crossing collisions. The scope of our November 2005 audit report did not include the reporting of all train accidents. However, it is reasonable to assume that railroad employees could encounter some confusion over FRA's reporting requirements for other train accidents and rail incidents similar to the confusion we identified for the reporting of grade crossing collisions. Common factors in reporting criteria for train accidents and grade crossing collisions are deaths, serious injuries, and monetary damages to equipment and property. In our 2005 report, we pointed out that the overlapping of these criteria may contribute to confusion and underreporting on the part of railroads. In simplifying existing NRC criteria, we stated that FRA should review the requirements for railroads to report grade crossing collisions as well as other train accidents and rail incidents.

2. **Mr. Scovel, why is it important for railroads to report these accidents immediately as required? Does it help FRA or NTSB determine whether to launch an investigation?**

It is important for the railroads to comply with Federal regulations to immediately notify NRC telephonically of certain deaths, injuries, collisions, and other incidents at grade crossings because timely reporting allows the Federal Government to decide whether or not to conduct an investigation at the scene, as soon as possible after a crossing collision has occurred. As part of the Department of Homeland Security, NRC is the Federal Government's 24-hour point of contact for environmental discharges anywhere in the United States and its territories. In addition, NRC has agreements with a number of Federal agencies, such as the Department of Homeland Security, Environmental Protection Agency, and Federal Emergency Management Agency, to notify them of certain accidents and/or incidents. These agreements contain pre-established criteria that NRC uses as a basis for notification when accidents occur. For example, NRC is responsible for notifying FRA, National Transportation Safety Board (NTSB), and other agencies of certain train accidents, rail incidents, and grade crossing collisions so that these agencies can decide to what extent they should respond. As long as this reporting system works as intended, yes, immediately reporting to NRC is helpful to FRA and NTSB.

3. Mr. Scovel, what recommendations have you made to improve the FRA's regulations governing accident reporting? Is it easy for a railroad to under report or misreport an accident to the FRA? Did you find any instances of this in your research?

In our November 2005 report, we made a recommendation to improve Federal regulations governing accident reporting. We recommended that FRA:

- Clarify accident reporting to NRC by requiring the railroads to report any grade crossing collision resulting in a fatality at the scene or death within 24 hours of the collision. FRA concurred with our recommendation and planned to issue a proposed rule clarification to the Code of Federal Regulations, Title 49, Part 225.9, "Telephonic Reports of Certain Accidents/Incidents and Other Events." As of March 1, 2007, this regulation had not been clarified.

To answer your question regarding the underreporting of accidents, our ongoing work continues to identify problems with the completeness of FRA's accident reporting system. Although there are Federal laws that require accurate, complete, and timely reporting of all grade crossing collisions to FRA, we found that railroads are not providing timely written reports to FRA for all grade crossing collisions. Specifically, our work identified 12 railroads between 1999 and 2004 that did not report 139 collisions to FRA on time, with some being reported nearly 3 years late. These collisions resulted in 2 fatalities and 20 injuries, as ultimately reported by the railroads. Although these numbers are not large, FRA does not know whether all collision reports have been submitted, as required, because it has not routinely reviewed the grade crossing collision records maintained by the railroads to ensure compliance with its reporting requirements.

Our work identified another example of underreporting by a Class I railroad. In November 2006, FRA officials found an unusually low number of injuries reported for grade crossing collisions involving this railroad when the train and/or motor vehicle were traveling in excess of 35 miles per hour—no injuries were reported for 154 collisions. FRA officials concluded that this railroad was not adequately seeking or collecting injury information and issued one safety violation for failing to have an adequate procedure for determining the extent of injuries to highway users involved in grade crossing collisions.

4. **Mr. Scovel, what happens if a person dies at the hospital after an accident occurs? Is that death reported by the railroads? If not, should the FRA amend its rules to ensure these deaths are reported to the National Response Center?**

   In our November 2005 audit report, we found that the underreporting of grade crossing collisions to NRC is attributable largely to injured highway users dying after they were transported from the scene of grade crossing collisions. We also found that the railroad involved in a grade crossing collision is usually informed when a highway user dies at the hospital. Subsequently, the railroad reports the fatality in its written report to FRA, which is submitted within 30 to 60 days after the collision. The railroads did not telephonically report deaths at hospitals to NRC because FRA's criteria for reporting grade crossing collisions does not specifically require the reporting of deaths that occur after injured highway users are transported from the collision scene.

   Yes, FRA should amend its regulations to require the reporting of grade crossing fatalities that occur at hospitals to allow FRA officials to determine to what extent they should respond. As we recommended in 2005, FRA should clarify accident reporting to NRC by requiring the railroads to report any grade crossing collision resulting in a fatality at the scene or death within 24 hours of the collision. FRA concurred with our recommendation and planned to issue a proposed rule clarification to the Code of Federal Regulations, Title 49, Part 225.9, "Telephonic Reports of Certain Accidents/Incidents and Other Events." As of March 1, 2007, this regulation had not been clarified.

5. **Mr. Scovel, is the number of civil penalties issued (and their amounts) sufficient enough to deter railroads from violating Federal safety regulations, or are they just the cost of doing business?**

   Our research indicates that FRA's enforcement of Federal rail safety laws through its assessment and collection of civil penalties needs to be evaluated. From Fiscal Year (FY) 2002 through FY 2006, FRA proposed $76.5 million in civil penalties for railroads' noncompliance with Federal safety laws and settled these enforcement cases with the railroads paying the Federal Government $48.7 million. On average, these payments amount to $9.7 million per year, for an industry that has an annual net operating income of about $6.1 billion. We plan to conduct an audit to evaluate the number and amount of civil penalties FRA has assessed the railroads.

6. **Mr. Scovel, when conducting your audit, you learned that the FRA holds a settlement conference once or twice a year to negotiate-down the fines and penalties issued to railroads. What percentage on a dollar does the FRA, on average, negotiate the fines and penalties down to?**

   In conducting our body of rail safety work, we learned that FRA holds an annual settlement conference with the larger railroads to negotiate the civil penalties assessed for noncompliance with Federal safety laws. In FY 2006, on behalf of the Federal Government, FRA collected an average of 63 cents per dollar on the penalties it assessed. FRA officials stated that they proposed $17 million in civil penalties and settled their enforcement cases for a total of $10.7 million. FRA's civil penalty process is described in the Code of Federal Regulations, Title 49, Part 209.409, "Penalties."

7. **Mr. Scovel, how does the level of FRA's inspectors compare to the other modal administrations? Should the FRA have more inspectors?**

   As of January 2007, FRA had an inspector workforce of 385. These safety inspectors were divided among 5 inspection disciplines—Hazardous Materials (58 inspectors), Motive Power and Equipment (91 inspectors), Operating Practices (84 inspectors), Signal and Train Control (77 inspectors), and Track (13 inspectors) and 13 inspectors were being trained. In comparison, the Federal Aviation Administration had about 3,800 safety inspectors and the Federal Motor Carrier Safety Administration had 264 inspectors.

   Although we do not have specific data showing a correlation between additional inspectors and rail safety, we found that FRA has limited resources to conduct accident and incident investigations and inspect the 173,000 miles of track. To better allocate its limited inspection resources, in February 2005,[2] we recommended a more data-driven approach in our report to the Secretary and Acting FRA Administrator on our review of FRA's safety enforcement data. Specifically, we recommended that FRA develop a comprehensive plan for implementing an inspection program that systematically uses trend analysis, along with other data analysis tools, to examine key indicators of a railroad's safety condition to target inspection resources to problem areas.

[2] OIG Memorandum, "Safety-Related Findings and Recommendations," February 16, 2005

8. Mr. Scovel, what can the FRA do to improve its inspection and enforcement program?

Since 1998, our audit results have repeatedly shown that FRA would benefit from an inspection program that places substantially greater emphasis on data analysis to target its inspection and enforcement resources—a proactive rather than reactive strategy. Such an approach would aid in identifying some of the most prevalent causes of train accidents and enable FRA to devise corrective measures. Our ongoing analyses show that human factors and track problems were responsible for 72 percent of the train accidents that occurred from 1996 through 2005. By using trend analysis to track predictive indicators in problem areas, FRA could identify potential safety "hot spots." A number of predictive indicators, such as those identifying improperly lined switches or unusually high defect ratios, could yield beneficial preventive measures.

In February 2005, we reported that FRA would benefit from a data-driven inspection program that makes substantially greater use of objective analysis of empirical data and metrics to target its inspection and enforcement activities. We also reported that this approach would enable FRA to better allocate its inspection resources and decide appropriate levels of enforcement. In January 2007, we testified that FRA had 385 inspectors to oversee the Nation's vast network of train miles. Given its safety mission, it is critical that FRA's limited inspection and enforcement resources be carefully targeted to address those safety problems most likely to result in accidents and injuries.

In our February 2005 report, we recommended that FRA submit to the Secretary a comprehensive plan for implementing a fully functioning program that makes meaningful use of analysis of available safety, inspection, and enforcement data. We stated that targeting could be achieved through the systematie use of trend analysis, along with other data analysis tools, to examine key indicators of a railroad's safety condition (for example, its accident rate, defect ratio, and employee injury statistics). The identification of trends for the targeting of resources to high-risk areas is particularly critical because FRA inspections decreased by 6 percent, from 67,517 in 2003 to 63,264 in 2005.

FRA has been responsive to our 2005 recommendations to implement a data-driven approach. Specifically, FRA implemented its National Inspection Plan in March 2006. This Plan consists of an inspection and allocation program that uses predictive indicators to assist FRA in allocating inspection and enforcement activities within a given region by railroad and by state. This new plan is a step in the right direction for FRA, but it is too soon to tell exactly how effective these measures will be in the long term.

9. Mr. Scovel, states can play an important role in assisting FRA with ensuring safety along the rail lines. Unfortunately, FRA has been reluctant to allow states to regulate the railroads in order to provide a safe environment for their residents. What role do you feel states should play in assisting with railroad safety and regulation?

We agree that states can play an important role in assisting FRA with ensuring safety along rail lines. In 2004,[3] we reported that although FRA and the Federal Highway Administration oversee grade crossing safety, the responsibility for improving crossings and eliminating hazards rests primarily with the states. We found that states could further improve safety at public grade crossings equipped with automatic gates by installing cost-effective physical barriers or longer gate arms to prevent motorists from circumventing the gates. We also found that states could enhance safety by passing legislation to: (1) install cameras at grade crossings to catch motorists when they disobey a grade crossing warning device, and (2) establish stricter state and local penalties for grade crossing violations.

Our ongoing audit work on grade crossing safety found that states could assist FRA in enforcing grade crossing collision reporting requirements by comparing state and local police reports to collisions reported in FRA's Railroad Accident/Incident Reporting System, and then notifying FRA when a collision has not been reported. We also found that 27 states currently lack state laws for maintaining sight distances at grade crossings that are not protected by automated warning devices. When grade crossings are equipped solely with signs, pavement markings, and other passive warnings, it is imperative that highway users have a clear view of approaching trains in order to determine when it is safe to cross. To further improve rail safety, FRA should collaborate with the Federal Highway Administration and the American Association of State Highway and Transportation Officials to assess the need for mandatory national standards for maintaining sight distances at grade crossings equipped only with passive warnings.

[3] OIG Report No. MH-2004-065, "Audit of the Highway-Rail Grade Crossing Safety Program," June 16, 2004.

United States Government Accountability Office

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Testimony

Before the Subcommittee on Railroads, Pipelines, and Hazardous Materials, Committee on Transportation and Infrastructure, House of Representatives

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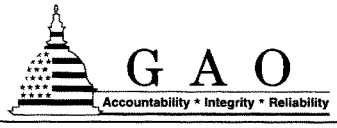
RAIL SAFETY

The Federal Railroad Administration Is Better Targeting Its Oversight, but Needs to Assess the Impact of Its Efforts

Statement of Katherine Siggerud
Physical Infrastructure Issues



GAO-07-390T

January 30, 2007

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Highlights

Highlights of GAO-07-390T, a testimony before the Subcommittee on Railroads, Pipelines, and Hazardous Materials, Committee on Transportation and Infrastructure, House of Representatives

RAIL SAFETY

The Federal Railroad Administration Is Better Targeting Its Oversight, but Needs to Assess the Impact of Its Efforts

Why GAO Did This Study

Although the overall safety record of the railroad industry, as measured by the number of train accidents per million miles traveled, has improved markedly since 1980, there has been little or no overall improvement over the past decade. Serious accidents resulting in injuries and deaths continue to occur, such as one in Graniteville, South Carolina, that resulted in 9 deaths and 292 injuries. The Federal Railroad Administration (FRA) develops safety standards and inspects and enforces railroads' compliance with these standards.

On January 26, 2007, GAO reported on FRA's overall safety oversight strategy. (See GAO-07-149.) The report discussed how FRA (1) focuses its efforts on the highest priority risks related to train accidents in planning its oversight, (2) identifies safety problems on railroad systems in carrying out its oversight, and (3) assesses the impact of its oversight efforts on safety. GAO recommended that FRA (1) put into place measures of the results of its inspection and enforcement programs and (2) evaluate its enforcement program. In reviewing a draft of that report, the Department of Transportation did not provide overall views on its contents or its recommendations.

The statement is based on GAO's recent report.

www.gao.gov/cgi-bin/getrpt?GAO-07-390T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Katherine Siggerud at (202) 512-2834 or siggerudk@gao.gov.

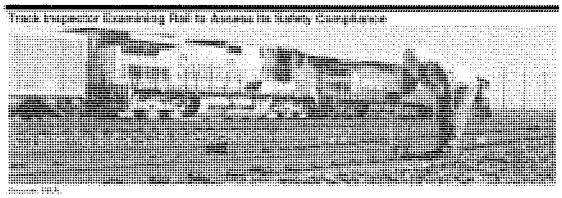
What GAO Found

In planning its safety oversight, FRA is focusing its efforts on the highest priority risks related to train accidents through initiatives aimed at addressing their main causes—human behaviors and defective track—as well as through improvements in its inspection planning approach. FRA's May 2005 National Rail Safety Action Plan, the agency's overall strategy for targeting its oversight at the greatest risks, provides a reasonable framework for guiding these efforts. FRA's initiatives to address the most common causes of accidents are promising, although the success of many of them will depend on voluntary actions by the railroads. In addition, under the action plan, FRA has adopted a new inspection planning approach in which inspectors focus their efforts on locations that data-driven models indicate are most likely to have safety problems.

In carrying out its safety oversight, FRA identifies a range of safety problems on railroad systems mainly by determining whether operating practices, track, and equipment are in compliance with minimum safety standards. However, FRA is able to inspect only about 0.2 percent of railroads' operations each year, and its inspections do not examine how railroads are managing safety risks throughout their systems that could lead to accidents. Such an approach, as a supplement to traditional compliance inspections, is used in the oversight of U.S. commuter railroads and pipelines and of Canadian railroads. GAO did not recommend that FRA adopt this approach because the agency's various initiatives to reduce the train accident rate have not yet had time to demonstrate their effects on safety.

FRA uses a range of goals and measures to assess the impact of its oversight, such as (1) goals to target its inspection and enforcement programs at reducing various types of railroad accidents and (2) related measures, such as rates of track-caused accidents, to monitor its progress. However, FRA's ability to make informed decisions about these programs is limited because it lacks measures of their direct results, such as the correction of identified safety problems. Furthermore, FRA has not evaluated the effectiveness of its enforcement program.

Track Inspector Examining Rail to Assess Its Safety Compliance

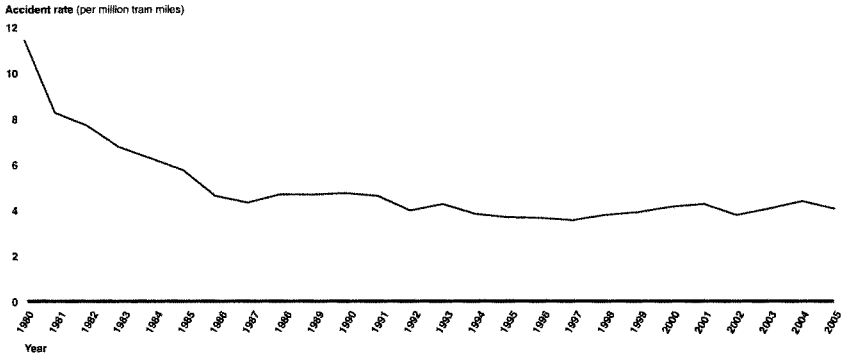


Source: FRA.

Madam Chairwoman and Members of the Subcommittee:

We appreciate the opportunity to participate in this hearing today to discuss the Federal Railroad Administration's (FRA) rail safety oversight activities. Although the overall safety record in the railroad industry, as measured by the number of train accidents per million miles traveled, has improved markedly since 1980, there has been little or no overall improvement over the past decade. (See fig. 1.) Serious accidents resulting in injuries, deaths, and property damage continue to occur.

Figure 1: Train Accident Rates, 1980 through 2005



Source: FRA

My remarks center on work we have recently completed on FRA's overall safety oversight strategy. Specifically, we examined how FRA (1) focuses its efforts on the highest priority risks related to train accidents in planning its safety oversight, (2) identifies safety problems on railroad systems in carrying out its oversight, and (3) assesses the impact of its

oversight efforts on safety. Our findings are discussed in more detail in our report, which was released last week.[1]

Our work was based on a review of laws, regulations, and FRA plans and guidance as well as discussions with FRA officials and with a range of external stakeholders, including railroads, unions, and state railroad safety organizations. We reviewed FRA inspection and enforcement data for 1996 through 2005. In addition, we examined risk management principles and safety oversight approaches used by other modal administrations within the Department of Transportation and other organizations that have similar safety missions in order to determine their possible application to FRA. Our work focused on FRA oversight efforts to reduce the rate of train accidents rather than those to reduce highway-rail crossing and trespassing accidents because (1) the Department of Transportation's Inspector General has recently assessed efforts to reduce highway-rail crossing accidents[2] and (2) trespassing accidents primarily involve issues not related to railroad safety performance. As part of our review, we assessed internal controls and the reliability of the data elements needed for this engagement and determined that the data elements were sufficiently reliable for our purposes. We conducted our work from November 2005 through January 2007 in accordance with generally accepted government auditing standards.

In summary:

- In planning its safety oversight, FRA is focusing its efforts on the highest priority risks related to train accidents through various initiatives aimed at addressing the main causes of these accidents as well as through improvements in its inspection planning approach. The agency's overall strategy for targeting its oversight at the greatest risks is the National Rail Safety Action Plan, which FRA issued in May 2005. This plan provides a reasonable framework for guiding the agency's efforts to improve its oversight. It includes initiatives to address the two main causes of train

[1]See GAO, *The Federal Railroad Administration Is Taking Steps to Better Target Its Oversight, but Assessment of Results Is Needed to Determine Impact*, GAO-07-149 (Washington, D.C.: Jan. 26, 2007).

[2]See U.S. Department of Transportation, Office of the Inspector General, *Audit of Oversight of Highway-Rail Grade Crossing Accident Reporting, Investigations and Safety Regulations*, MH-2006-016 (Washington, D.C.: Nov. 28, 2005) and *Report on the Audit of the Highway-Rail Grade Crossing Safety Program*, MH-2004-065 (Washington, D.C.: June 16, 2004).

accidents—human factors and defective track—and FRA has pursued some additional initiatives to address these causes since issuing the plan.[3] These initiatives—which include new regulations, research on new technologies and approaches for improving safety, and new vehicles for inspecting track—are promising. However, most of them have not yet been fully implemented, and their overall impact on safety will probably not be apparent for a number of years. Furthermore, the ability of many of these efforts to improve safety will depend on voluntary actions by railroads. In addition, the action plan announced a new approach for planning inspections that uses data-driven models to focus inspectors' efforts on locations that are likely to have safety problems.

- In carrying out its safety oversight, FRA identifies safety problems on railroad systems mainly through routine inspections that determine whether operating practices, track, and equipment, such as signals and locomotives, are in compliance with minimum safety standards. However, FRA inspections cover only about 0.2 percent of railroads' operations each year. Also, these inspections are not designed to determine how well railroads are managing safety risks throughout their systems that could lead to accidents. The American Public Transportation Association (APTA), the Pipeline and Hazardous Materials Safety Administration (PHMSA), and Transport Canada have implemented approaches to oversee the management of safety risks by U.S. commuter railroads, U.S. pipelines, and Canadian railroads, respectively.[4] These oversight approaches complement, rather than replace, traditional compliance inspections and, therefore, provide additional assurance of safety.

- FRA uses a broad range of goals and measures to assess the impact of its oversight efforts on safety. For example, it has developed new goals to target its inspection and enforcement efforts at reducing various types of railroad accidents and related measures to track its progress. However, FRA lacks measures of the direct results of its inspection and enforcement programs, such as measures of the extent to which these programs have resulted in the correction of identified safety problems. Furthermore, FRA has not evaluated the effectiveness of its enforcement program in achieving desired results. Both performance measures and evaluations can provide valuable information on program results that helps hold agencies

[3]Generally, human factors are behaviors that affect job performance, such as incorrectly setting switches.

[4]Risk management can be described as a systematic approach for identifying, analyzing, and controlling risks.

accountable for the performance of their programs. In our recent report, we recommended that FRA develop and implement measures of the direct results of its inspection and enforcement programs and evaluate its enforcement program. FRA reviewed a draft of our report but did not comment on our recommendations.

Background

On average, about 450 people have been injured and 14 people have been killed in train accidents each year over the past decade, from 1996 through 2005, exclusive of highway-railroad grade crossing and trespassing accidents. In recent years, a number of serious accidents raised concerns about the level of safety in the railroad industry. For example, as you are aware, in 2005, a train collision in Graniteville, South Carolina, resulted in the evacuation of 5,400 people, 292 injuries, and 9 deaths.

FRA develops and enforces regulations for the railroad industry that include numerous requirements related to safety, including requirements governing track, signal and train control systems, grade crossing warning device systems, mechanical equipment—such as locomotives and tank cars—and railroad operating practices. FRA also enforces hazardous materials regulations issued by PHMSA as they relate to the safe transportation of such materials by rail. FRA's inspectors generally specialize in one of five areas, called inspection disciplines: (1) operating practices, (2) track, (3) hazardous materials, (4) signal and train control, and (5) motive power and equipment. FRA's policy is for inspectors to encourage railroads to comply voluntarily. When railroads do not comply voluntarily or identified problems are serious, FRA may cite violations and take enforcement actions, most frequently civil penalties, to promote compliance with its regulations. FRA is authorized to negotiate civil penalties with railroads and exercises this authority. FRA conducts additional oversight of Class I railroads through the Railroad System Oversight program.[5] Under this program, the agency assigns an FRA manager for each Class I railroad to cooperate with it on identifying and resolving safety issues.

FRA is a small agency, especially in relation to the industry it regulates. As of July 2006, FRA had about 660 safety staff, including about 400 inspectors in the field (in its regional, district, and local offices). In

[5]For 2005, the Surface Transportation Board has defined Class I railroads as railroads earning adjusted annual operating revenues of $319.3 million or more.

addition, 30 state oversight agencies, with about 160 inspectors, participate in a partnership program with FRA to conduct safety oversight activities at railroads' operating sites. In contrast, the railroad industry consists of about 700 railroads with about 235,000 employees,[6] 219,000 miles of track in operation, 158,000 signals and switches, and over 1.6 million locomotives and cars.

FRA Has Made Progress in Targeting Its Oversight Efforts on the Basis of Risk

In planning its safety oversight, FRA focuses its efforts on the highest priority risks related to train accidents through a number of initiatives. FRA's May 2005 National Rail Safety Action Plan provides a reasonable framework for the agency's efforts to target its oversight at the highest priority risks. The plan outlines initiatives aimed at reducing the main types of train accidents, those caused by human factors and track defects. Since issuing the plan, the agency has pursued additional initiatives to target risks posed by these causes. However, these efforts are in varying stages of development or implementation and, while some individual initiatives may start showing results in the next year or two, their overall impact on safety will probably not be apparent for a number of years. FRA has also developed a new approach for planning its inspections, based on greater use of its accident and inspection data. While these initiatives are promising, it is too early to assess their impact.

FRA Is Making a Number of Efforts to Reduce Accidents Caused by Human Factors and Track Defects, but Results Are Not Yet Clear

In 2005, 72 percent of all train accidents in the United States were attributable to either human factors or track defects. Human factor accidents result from unsafe acts of individuals, such as employee errors, and can occur for a number of reasons, such as employee fatigue or inadequate supervision or training. Recent FRA initiatives to reduce accidents caused by human factors include

- proposed regulations aimed at reducing the most common causes of these accidents, such as improper positioning of track switches;[7]
- a 5-year pilot project to establish a confidential voluntary system for reporting and learning from close call incidents;[8]

[6]This number does not include contractor employees hired by the railroads.

[7]FRA issued this proposed regulation in October 2006 and plans to issue a final regulation by the end of 2007.

- a study to develop a fatigue model that could be used by railroads to improve train crew scheduling practices and prevent worker fatigue;[9] and

- a proposed 5-year pilot project that would use risk management to help reduce human factor accidents, as well as other types of accidents, at selected railroad worksites.

Track defects, which can cause derailments, include rails that are uneven or too wide apart or rails or joint bars that are cracked or broken. Key recent FRA initiatives to reduce accidents caused by track defects include

- two additional track inspection vehicles that can precisely measure track during inspections;[10] and

- new regulations on inspections of rail joints in continuous welded rail track and plans to develop additional regulations to improve railroads' management of this type of track.[11]

These initiatives are in varying stages of development or implementation and use a variety of approaches, some quite innovative, for addressing the causes of human factor and track accidents. While they have the potential to eventually reduce these types of accidents, it is too early to predict their outcomes. The human factor initiatives, except for the proposed regulations, depend on voluntary actions by railroads, and, in some cases, labor as well, for their success.

[8]According to FRA, a close call represents a situation in which an ongoing sequence of events was stopped from developing further, preventing the occurrence of potentially serious safety-related consequences.

[9]Railroad employees often work long hours and have unpredictable and fluctuating work schedules. FRA and the National Transportation Safety Board have identified employee fatigue as a significant factor in many train accidents. FRA does not have the authority to regulate railroad worker duty hours.

[10]According to FRA, these additional vehicles will allow the agency to triple the miles of track that it is able to inspect per year, to nearly 100,000 miles. FRA also inspects track conditions through manual inspections conducted on foot or in on-track equipment.

[11]In continuous welded rail track, rails are welded together to form one continuous rail that may be several miles long. There may be joints in this rail for several reasons, including the need to replace a section of defective rail.

FRA Has Made Progress in Targeting Its Inspections on the Basis of Risk

FRA has developed a new approach—the National Inspection Plan—for using available data to target its inspections at the greatest safety risks. The plan provides guidance to each regional office on how its inspectors within each of the five inspection disciplines should divide up their work by railroad and state. It is based on trend analyses of accident, inspection, and other data that predict locations where train accidents and incidents are likely to occur within each region and provide the optimal allocation of inspection resources to prevent accidents.

Previously, FRA had a less structured, less consistent, and less data-driven approach for planning inspections. According to agency officials, each region prepared its own inspection plan, based on judgments about appropriate priorities and analysis of available data. However, the use of data was not consistent from region to region. Inspectors had greater discretion about where to inspect and based decisions about priorities on their knowledge of their inspection territories.

FRA's new approach for planning its inspection activity allows it to better target the greatest safety risks and make more effective use of its inspectors. However, it is not yet clear whether the new approach will lead to a prioritization of inspection levels across regions and inspection disciplines or improved safety.

FRA Relies Primarily on Direct Inspections to Identify Safety Problems and Does Not Oversee Railroads' Management of Safety Risks

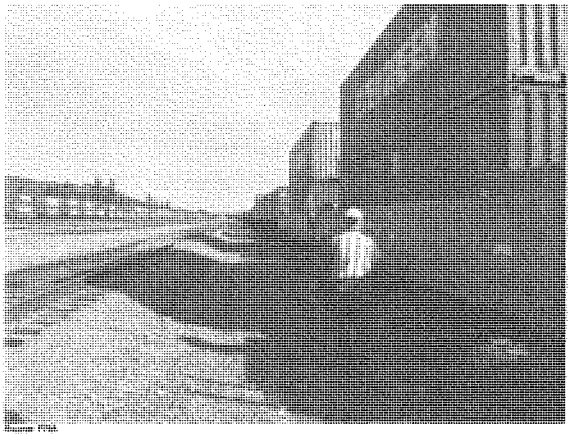
In carrying out its safety oversight, FRA identifies a range of safety problems on railroad systems mainly through routine inspections to determine whether operations, track, and equipment are in compliance with safety standards. FRA's inspections do not attempt to determine how well railroads are managing safety risks throughout their systems. APTA, PHMSA, and Transport Canada have implemented approaches to oversee the management of safety risks by U.S. commuter railroads, U.S. pipelines, and Canadian railroads, respectively. These oversight approaches complement, rather than replace, traditional compliance inspections and therefore provide additional assurance of safety.

FRA's Oversight Identifies a Range of Problems on Railroad Systems

FRA primarily monitors railroads' compliance through routine inspections by individual inspectors at specific sites on railroads' systems. Inspectors typically cover a range of standards within their discipline during these inspections. This inspection approach focuses on direct observations of specific components of the train, related equipment, and railroad

property—including the track and signal systems—as well as operating practices to determine whether they meet FRA's standards. (See fig. 2.) Inspectors also examine railroads' inspection and maintenance records. The railroads have their own inspectors who are responsible for ensuring that railroad equipment, track, and operations meet federal rail safety standards.

Figure 2: FRA Inspector Inspecting Train Cars



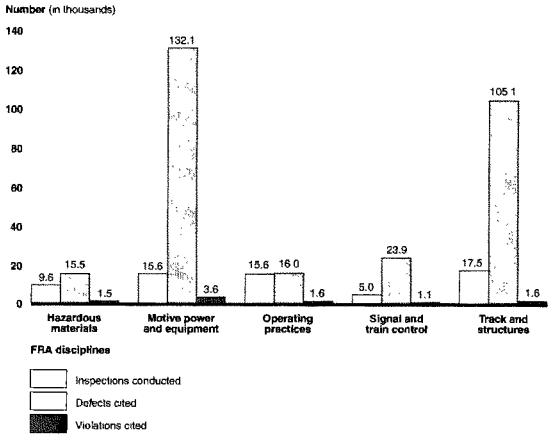
Source: FRA.

FRA also conducts more in-depth inspection efforts that generally focus on railroads' compliance in a particular area, such as their inspections of employees' adherence to operating rules. These efforts often involve a team conducting separate inspections at multiple sites, generally within one of FRA's eight regions. FRA also periodically conducts in-depth inspections of some systemwide programs that railroads are required to implement, such as employee drug and alcohol testing programs.

In 2005, federal and state inspectors conducted about 63,000 inspections. According to FRA, routine inspections constituted about 75 percent of the

inspections of railroads, and in-depth inspections accounted for about 11 percent. The remainder of these inspections (14 percent) consisted of other types of activities, such as investigations of accidents and complaints. This approach to oversight enables FRA inspectors and managers to identify a wide range of safety problems. Inspectors identify specific compliance problems—conditions that do not meet FRA's standards—at sites they visit by citing defects. Inspectors cite violations of safety standards for those defects that they believe warrant enforcement action. They consider a number of factors in making this decision, including the railroad's history of compliance at that location and the seriousness of the noncompliance (such as whether it is likely to cause accidents, injuries, or releases of hazardous materials). Inspectors in some disciplines cite more defects and violations than others. (See fig. 3.)

Figure 3: Inspections Conducted and Defects and Violations Cited, by Inspection Discipline, in 2005



Source: GAO analysis of FRA data

Note: These figures include inspections carried out by both federal and state inspectors. Inspectors are instructed to cite defects for most instances of noncompliance found, but have discretion in determining which instances to cite as violations warranting enforcement action.

The motive power and equipment discipline cites almost half of all defects and over a third of all violations. FRA officials told us that the standards in this inspection discipline are the most prescriptive, making defects and violations easier to find. However, these types of defects cause a much smaller proportion of accidents than human factors and track defects.[12] The most frequently cited violations include those for noncompliance with standards for locomotives and freight cars, track conditions, recordkeeping on the inspection and repair of equipment and track, and the condition of hazardous materials tank cars.

Several Other Organizations Have Implemented Comprehensive Approaches for Overseeing the Management of Safety Risks in Transportation Industries

FRA officials have noted that their approach of directly inspecting safety conditions and targeting locations that are most likely to have compliance problems provides a safety net and holds railroad management accountable. However, because the number of FRA and state inspectors is small relative to the size of railroad operations, FRA inspections can cover only a very small proportion of railroad operations (0.2 percent). Also, FRA targets inspections at locations on railroads' systems where accidents have occurred, among other factors, rather than overseeing whether railroads systematically identify and address safety risks that could lead to accidents.

Risk management can help to improve systemwide safety by systematically identifying and assessing risks associated with various safety hazards and prioritizing them so that resources may be allocated to address the highest risks first. It also can help in ensuring that the most appropriate alternatives to prevent or mitigate the effects of hazards are designed and implemented. A framework for risk management based on industry best practices and other criteria that we have developed divides risk management into five major phases: (1) setting strategic goals and objectives, and determining constraints; (2) assessing risks; (3) evaluating alternatives for addressing these risks; (4) selecting the appropriate alternatives; and (5) implementing the alternatives and monitoring the progress made and results achieved.

[12]FRA officials have explained that operating practices inspectors have had a limited ability to cite defects and violations because of the way regulations in this area are written. For example, as noted previously, the regulations contain general requirements about railroads' programs for inspecting employees' adherence to operating rules and do not specifically require that employees follow these rules. The agency expects that its proposed regulations on operating rules will improve its ability to enforce in this area, because the requirements will be more stringent than existing regulations.

Other transportation oversight organizations have developed and implemented approaches for overseeing industries' overall management of safety risks. In particular, during the last 10 years, APTA, PHMSA, and Transport Canada have developed and implemented such oversight approaches for U.S. commuter railroads, U.S. pipelines, and Canadian railroads, respectively. These approaches complement, rather than replace, traditional compliance inspections. APTA provides guidelines to commuter railroads on managing the safety of their systems—including safety risks—and audits their plans for and implementation of this management approach.[13] PHMSA requires that pipeline operators develop "integrity management" programs to manage risk in areas—such as those that are densely populated—where leaks or ruptures could have the greatest impact on public safety and inspects operators' compliance with these requirements.[14] In Canada, the department responsible for overseeing railroad safety, Transport Canada, requires that railroads establish safety management systems that include risk management and assesses these systems.[15] APTA, PHMSA, and Transport Canada have emphasized that risk management provides a higher standard of performance than traditional safety regulation based on compliance alone.

We have reviewed PHMSA's gas transmission pipeline integrity management oversight approach and have recently concluded that it enhances public safety.[16] Operators told us that the primary benefit of the program is the comprehensive knowledge they acquire about the condition of their pipelines. APTA and Transport Canada officials have told us that their oversight approaches have not been formally evaluated to determine their effectiveness.

FRA has taken some steps in a limited number of areas to oversee and encourage risk management in the railroad industry. For example, the agency has several regulations in place that require railroads to use a risk-

[13]APTA is a nonprofit organization representing the transit industry, including U.S. commuter rail systems.

[14]PHMSA administers the national regulatory program to ensure the safe transportation of hazardous liquids and natural gas by pipeline.

[15]Transport Canada oversees the safety and security of Canada's rail, marine, highway, and aviation operations.

[16]GAO, *Natural Gas Pipeline Safety: Integrity Management Benefits Public Safety, but Consistency of Performance Measures Should Be Improved.* GAO-06-946 (Washington, D.C.: Sept. 8, 2006).

based approach for managing safety in some specific areas, such as the operation of high-speed passenger trains. In addition, FRA is considering establishing a pilot project to examine how a risk management approach could be used voluntarily in the railroad industry to reduce human factor and other types of accidents.

Oversight of railroads' overall approach for managing safety risks on their systems, in addition to FRA's existing discipline-specific, compliance-based oversight, has the potential to provide additional assurance of safety. However, developing and implementing such a new oversight approach would be a major undertaking for the agency, and FRA's current initiatives to reduce train accidents need time to mature to demonstrate their effects. As a result, we did not recommend in our recent report that FRA adopt an approach for overseeing railroads' management of safety risks.

FRA Measures Its Progress in Achieving a Variety of Safety Goals, but Has Limited Information on the Direct Results of Its Oversight

FRA has a broad range of goals and measures that it uses to provide direction to and track the performance of its safety oversight activities. However, its ability to make informed decisions about its inspection and enforcement programs is limited because it lacks measures of the intermediate outcomes, or direct results, of these programs that would show how they are contributing toward the end outcomes, or ultimate safety improvements, that the agency seeks to achieve. Furthermore, FRA has not evaluated the effectiveness of its enforcement approach. Both performance measures and evaluations can provide valuable information on program results that helps hold agencies accountable for their programs' performance.

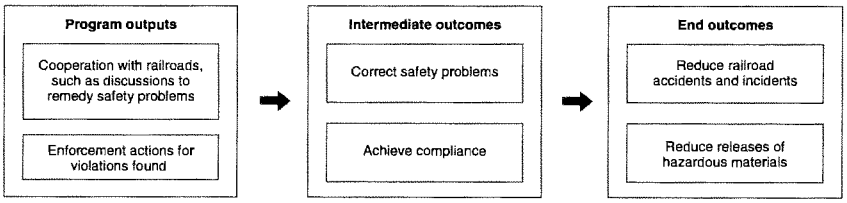
FRA Has Established a Range of Safety Goals and Measures, but Information on Direct Results Is Limited

To its credit, FRA has adopted a range of useful safety performance goals and related measures. These goals help the agency target its oversight efforts to achieve the department's goals of reducing (1) the rate of rail-related accidents and incidents and (2) the number of serious hazardous materials releases. For example, FRA has recently established new agencywide safety goals that are aligned with its five inspection disciplines and its grade-crossing efforts. These include goals to reduce the rates of various types of train accidents—including those caused by human factors, track defects, and equipment failure—as well as hazardous materials releases and grade-crossing incidents. These departmental and agency goals represent the key end outcomes, or ultimate results, FRA seeks to achieve through its oversight efforts. FRA has also established related measures that help the agency determine and demonstrate its

progress in meeting the desired goals. In addition, it has also established similar goals and measures for each of its eight regional offices. FRA also uses various other measures to manage its oversight efforts, such as numbers of inspections performed and enforcement actions taken.

While FRA has developed a range of goals and measures related to its oversight of railroad safety, it lacks measures of the desired intermediate outcomes, or direct results, of its inspection and enforcement efforts—the correction of identified safety problems and improvements in compliance. (See fig. 4.) According to FRA officials, inspectors review reports on corrective actions provided by railroads and always follow up on serious identified problems to ensure that they are corrected. However, the agency does not measure the extent to which the identified safety problems have been corrected. FRA also lacks overall measures of railroads' compliance. Officials have emphasized that the agency relies on inspectors' day-to-day oversight of and interaction with railroads to track compliance.[17]

Figure 4: How FRA's Inspection and Enforcement Programs Contribute to Rail Safety



Source: GAO analysis of FRA information

Note: The program outputs and intermediate outcomes included in this figure are examples of the outputs and intended direct results of FRA's inspection and enforcement programs. We identified these as outputs and intermediate outcomes based on discussions with FRA officials; FRA itself has not identified them as such.

Without measures of intermediate outcomes, the extent to which FRA's inspection and enforcement programs are achieving direct results and contributing to desired end outcomes is not clear. We recognize that

[17]FRA headquarters and regional officials also analyze defect data in each inspection discipline to identify emerging issues and plan inspection activity.

developing such measures would be difficult and that it is challenging for regulatory agencies to develop such measures. Nevertheless, some other regulatory agencies in the Department of Transportation have done so. For example, the Federal Motor Carrier Safety Administration measures the percentage of truck companies that improve their performance in a follow-up inspection.

FRA Has Made Changes in Response to Evaluations but Has Not Evaluated Its Enforcement Approach

By examining a broader range of information than is feasible to monitor on an ongoing basis through performance measures, evaluation studies can explore the benefits of a program as well as ways to improve program performance. They can also be used to develop or improve agencies' measures of program performance and help ensure agencies' accountability for program results. Although FRA has modified several aspects of its safety oversight in response to external and internal evaluations, it has not evaluated the extent to which its enforcement is achieving desired results.

Under FRA's current "focused enforcement" policy, developed in the mid-1990s, inspectors cite a small percentage of identified defects (about 3 percent in 2005) as violations that they recommend for enforcement action, generally civil penalties. While this policy relies to a great extent on cooperation with railroads to achieve compliance and is intended to focus FRA's enforcement efforts on those instances of noncompliance that pose the greatest safety hazards, it is not clear whether the number of civil penalties issued, or their amounts, are having the desired effect of improving compliance. Without an evaluation of its enforcement program, FRA is missing an opportunity to obtain valuable information on the performance of this program and on any need for adjustments to improve this performance.

In the report we issued last week, we recommended that FRA (1) develop and implement measures of the direct results of its inspection and enforcement programs and (2) evaluate the agency's enforcement program to provide further information on its results, the need for additional data to measure and assess these results, and the need for any changes in this program to improve performance. FRA did not express a view on these recommendations when it commented on our draft report. As part of our normal recommendation follow-up activity, we will work toward FRA's adoption of our recommendations.

Madam Chairwoman, this concludes my prepared statement. I would be pleased to respond to any questions that you or other Members of the Subcommittee might have.

GAO Contacts and Staff Acknowledgement

For further information on this statement, please contact Katherine Siggerud at (202) 512-2834 or siggerudk@gao.gov. Individuals making key contributions to this testimony were Judy Guilliams-Tapia, Bonnie Pignatiello Leer, and James Ratzenberger.

United States Government Accountability Office
Washington, DC 20548

March 15, 2007

The Honorable Corrine Brown
Chairwoman, Subcommittee on Railroads,
Pipelines, and Hazardous Materials
Committee on Transportation and Infrastructure
House of Representatives

Subject: *Railroad Safety–Responses to Posthearing Questions*

Dear Madam Chairwoman:

This letter responds to your request that we provide responses to questions related to our recent testimony before your subcommittee on reauthorizing federal rail safety programs.[1] Our testimony discussed how the Federal Railroad Administration (FRA) (1) focuses its efforts on the highest priority risks related to train accidents in planning its oversight, (2) identifies safety problems on railroad systems in carrying out its oversight, and (3) assesses the impact of its oversight efforts on safety. This testimony was based on our recent report on these topics.[2] Your questions, along with our responses, follow.

1. *You mention that the success of many of FRA's initiatives addressing the most common causes of accidents will depend on voluntary actions by the railroads. Why? Is FRA focusing too much on voluntary measures and not enough on mandating regulations?*

A number of FRA's current safety initiatives do rely to a great extent on voluntary actions by the railroads. For example, the close call reporting system[3] will depend for its success on extensive participation by railroads. As we reported in January, one railroad has committed to participate in this pilot project in one rail yard, and, according to FRA, two others have expressed strong interest. In addition, FRA's efforts to develop a model to address the problem of worker fatigue depend on the extent to which railroads eventually use this model to improve train crew scheduling practices. Also, the agency emphasizes achieving compliance from railroads voluntarily and takes enforcement action only in a small percentage of cases of

[1]GAO, *Rail Safety: The Federal Railroad Administration Is Better Targeting Its Oversight, but Needs to Assess the Impact of Its Efforts*, GAO-07-390T (Washington, D.C.: Jan. 30, 2007).
[2]GAO, *The Federal Railroad Administration Is Taking Steps to Better Target Its Oversight, but Assessment of Results Is Needed to Determine Impact*, GAO-07-149 (Washington, D.C.: Jan. 26, 2007).
[3]According to FRA, a close call represents a situation in which an ongoing sequence of events was stopped from developing further, preventing the occurrence of potentially serious safety-related consequences.

noncompliance found. We have not directly compared FRA's emphasis on voluntary actions with that of other modal administrations. For example, the Federal Aviation Administration has emphasized partnership with industry through programs that allow participants, such as airlines or pilots, to self-report violations of safety regulations and potentially mitigate or avoid civil penalties or other legal action. In the end, what is important is whether FRA is able to demonstrate, through the use of performance measures and evaluations of effectiveness, that its initiatives are effective in improving safety and are superior in terms of costs and benefits to other safety regulatory interventions.

2. *What percentage of railroad operations is FRA able to inspect each year?*

FRA estimates that it is able to inspect about 0.2 percent of railroad operations each year. See also the response to question 6 for a discussion of this issue and question 3 for an approach that could extend the reach of safety efforts.

3. *You state that FRA inspections are not designed to determine how well railroads are managing safety risks throughout their systems. What should FRA and its inspectors be doing differently?*

For the most part, FRA inspections determine whether railroads are complying with various safety standards, such as those related to track and equipment condition, and its inspections are targeted at locations where accidents have occurred or previous inspections have identified problems. A complementary approach to these compliance inspections is oversight of risk management, which can help to prevent accidents. Risk management can be described as a continuous process of managing—through the systematic identification, analysis, and control of risks associated with such hazards—the likelihood of their occurrence and their negative impact.[4] Oversight of risk management can provide additional assurance of safety beyond that provided by inspections of compliance with minimum safety standards. It can supplement uniform, minimum standards by encouraging or requiring companies to identify and address their unique safety risks. Risk management has been used in the private and public sectors for decades. For example, risk management approaches are being used for public transit and pipeline safety in the United States and for railroad safety in Canada, and the American Public Transportation Association, the Pipeline and Hazardous Materials Safety Administration, and Transport Canada, respectively, oversee these approaches. While FRA has taken some steps in a limited number of areas to encourage risk management in the railroad industry, it does not oversee railroads' overall approach for managing safety risks on their systems.

While we believe that adopting a comprehensive approach to overseeing railroads' management of safety risks can lead to improved safety, we did not recommend that FRA adopt such an approach. FRA is pursuing several initiatives aimed at reducing

[4]A framework for risk management based on industry best practices and other criteria that we have developed divides risk management into five major phases: (1) setting strategic goals and objectives, and determining constraints; (2) assessing risks; (3) evaluating alternatives for addressing these risks; (4) selecting the appropriate alternatives; and (5) implementing the alternatives and monitoring the progress made and the results achieved. See pages 35-39 of GAO-07-149 for further discussion.

accident rates, and these initiatives need time to mature to demonstrate their effects. At the appropriate time, the agency may wish to determine whether additional actions are needed.

4. *In follow-up to some questions at the hearing, has GAO studied, determined, or in any way looked at whether the number of inspectors at the FRA is sufficient?*

We did not assess whether the number of FRA inspectors was sufficient, nor did we assess the degree to which state railroad inspections complement FRA's inspections. However, we did note that the number of these inspectors is quite small compared with the size of the industry. (According to FRA, its inspectors inspect about 0.2 percent of railroad operations each year.)

As discussed both in our January 2007 report and in our testimony statement, the agency's implementation of its new inspection planning approach allows it to better target the greatest safety risks and therefore make more effective use of its inspector workforce. However, the agency's approach to conducting inspections focuses on determining compliance with minimum standards at specific sites visited. Oversight of railroads' management of safety risks throughout their systems could provide FRA with a greater "reach" and understanding of safety overall. However, we did not recommend that FRA adopt such an approach because its current initiatives to bring down the train accident rate need time to demonstrate their effects.

5. *How effective is FRA's safety program compared to the safety programs of other modal administrations?*

We did not attempt to compare the effectiveness of FRA's safety program to that of other modal administrations. Like other modal safety administrations that we have reviewed—the Federal Aviation Administration, the Federal Motor Carrier Safety Administration, and the Pipeline and Hazardous Materials Administration, FRA is relatively small compared to the industry it regulates. However, there are important differences among industries that would require careful study as part of any comparison of effectiveness. For example, the Federal Motor Carrier Safety Administration regulates about 677,000 commercial motor carriers, while FRA regulates fewer than 700 railroads.

6. *In your testimony, you state that FRA inspections cover only two-tenths of one percent all railroad operations. Is this a large enough sample to accurately gauge safety in the railroad industry?*

This is a difficult question to answer because it would require an assessment of not only the absolute number of inspections and resulting problems found, but also the manner in which FRA is deploying its inspectors and any deterrent effect that FRA's inspections and enforcement actions might have. We are encouraged that, in 2005, FRA developed an overall strategy through its National Rail Safety Action Plan for targeting its oversight to areas of greatest risk. We believe that the action plan provides a reasonable framework for guiding these efforts.

We also concluded that FRA needs to (1) do more to measure the direct results of its oversight, such as the extent to which identified safety problems are corrected, and (2) measure the effectiveness of its enforcement program. We made recommendations to this effect and are looking forward to FRA's response. Finally, as discussed earlier (see our response to question 3), adopting a risk management framework could expand the reach of FRA's inspection and enforcement programs.

7. *In your testimony, you state that the FRA does not oversee railroads' management of safety risk, while many other agencies do. Would such oversight improve the safety of railroad operations? Are there any models that the FRA should look at to implement its own program?*

See the response to question 3 for a discussion of this issue.

8. *What should the FRA do to improve its safety enforcement program?*

We found that FRA cannot demonstrate how its inspection and enforcement efforts are contributing to rail safety and that FRA lacks key information, such as measures of the direct results of these efforts, that could help it improve performance. While such measures are not always easy to develop, at least two other modal administrations within the department—the Federal Motor Carrier Safety Administration and the Pipeline and Hazardous Materials Safety Administration–have done so. Coupled with better measures of FRA's direct results is the need to assess the effectiveness of its enforcement approach, especially its use of civil penalties, to understand the degree to which they contribute to improved safety outcomes and to determine whether it should adjust its approach to improve performance. We recommended that FRA (1) develop and implement direct measures of its inspection and enforcement programs and (2) evaluate its enforcement program to provide further information on the program's results and the need for any changes to improve performance.

9. *Based on the small sample of railroad operations that the FRA inspects, and how it inspects them, do you believe that the FRA is in a position to say if the railroads are safe or not?*

See our response to question 6 for a discussion of this topic.

10. *In your testimony, you state that the FRA efforts to improve safety will depend on voluntary action by railroads. Is voluntary action sufficient to improve safety?*

See our response to question 1 for a discussion of this issue.

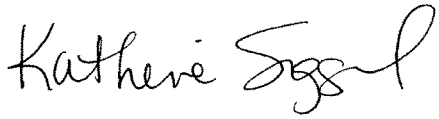
11. *States can play an important role in assisting FRA with ensuring safety along the rail lines. Unfortunately, FRA has been reluctant to allow states to regulate the railroads in order to provide a safe environment for their residents. What role do you feel states should play in assisting with railroad safety and regulation?*

As we noted in our January 2007 report, 30 state oversight agencies participate in a partnership program with FRA to conduct safety oversight activities at railroads' operating sites. About 160 state inspectors work with FRA to conduct inspections and other investigative and surveillance activities as needed. These inspectors are an important supplement to FRA's 400 inspectors, since the size of the railroad industry is quite large. FRA officials have told us that the agency does not provide funding for state inspection activities (except for training and computer equipment) and therefore does not have authority to tell states what inspections to conduct. FRA's regional offices do coordinate inspection activities with participating states in their region.

Our work focused on FRA's activities. We did not assess potential and actual states' roles or FRA's efforts to encourage state participation. If a larger role is envisioned for states, several questions would have to be addressed, including (1) the goals for state participation (e.g., increased safety levels to be achieved), (2) how federal and state efforts would complement each other, (3) what inspection and enforcement authority (e.g., to cite violations) would be allowed; and (4) who would pay for any increase in state inspection presence.

We are making copies of this letter available to others upon request and it will be available at no charge on the GAO Web site at http://www.gao.gov. If you have any questions about its content, please contact me at (202) 512-2834 or siggerudk@gao.gov. Contact points for our offices of Congressional Relations and Public Affairs may be found on the last page of this letter. Key contributors to this letter were Judy Guilliams-Tapia and James Ratzenberger.

Sincerely yours,



Katherine A. Siggerud
Director, Physical Infrastructure Issues

(542113)

Testimony of Robert L. Sumwalt, Vice Chairman
National Transportation Safety Board
before the
U.S. House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines and Hazardous Materials
January 30, 2007

Good morning Chairman Brown, Ranking Member Shuster and Members of the Subcommittee. My name is Robert Sumwalt and I am the Vice Chairman of the National Transportation Safety Board. I am being accompanied today by Mr. Robert Chipkevich, Director of Railroad, Pipelines and Hazardous Materials Investigations. Chairman Mark Rosenker asked me to represent the Board today to discuss railroad safety issues that are of concern to the Board. Mr. Chairman, I would like to take this opportunity to thank you, the Members of the Subcommittee and staff for inviting the Safety Board to testify today and for your focus on the furtherance of improving the safety of our Nation's railways.

The safety of the Nation's transportation system is the mission of the Board. I would like to discuss several areas of concern to you today—railroad fatigue, the transportation of hazardous materials in tank cars and positive train control.

Fatigue

Let me begin by saying train crew fatigue is an important issue at the Safety Board. Fatigue has been on our Most Wanted List since its inception in 1990 and, as you know, the problem is widespread. The problems associated with fatigue exact a heavy toll on our safety, productivity and quality of life. Our investigations show no one is exempt from the effects of fatigue. We have found fatigue to be a causal or contributing factor in crashes in every mode of transportation, particularly rail crashes.

The Safety Board most recently addressed this issue in its investigation of a collision between two freight trains at Macdona, Texas, on June 28, 2004. As a result of that accident, 3 people died from chlorine gas inhalation after a tank car was punctured.

The Safety Board determined that the probable cause of the collision of the Union Pacific Railroad train with a BNSF Railway train at Macdona was Union Pacific Railroad train crew fatigue that resulted in the failure of the engineer and conductor to appropriately respond to wayside signals governing the movement of their train. Contributing to the crewmembers' fatigue was their failure to obtain sufficient restorative rest prior to reporting for duty because of their ineffective use of off-duty time and Union Pacific Railroad train crew scheduling practices, which inverted the crewmembers' work/rest periods. Contributing to the accident was the lack of a positive train control system in the accident location.

The Safety Board concluded that the Union Pacific engineer had experienced micro sleeps followed by a deeper descent into sleep and that the conductor was most likely asleep

during most of the trip. Work as a train crewmember entails an unpredictable job schedule that can make it difficult for employees to effectively balance their personal and work lives. The Board concluded in the Macdona report that the unpredictability of Union Pacific train crewmembers' work schedules may have encouraged them to delay obtaining rest in the hope that they would not be called to work until later on the day of the accident. During periods when the demand for crews is high, the additional pressure on crewmembers who have not had a full rest period can make achieving such a balance particularly difficult.

The Safety Board also found that the minimum rest periods prescribed by Federal regulations do not take into account either the rotating work schedules or the accumulated hours spent working and in limbo time. Limbo time, the time when a crew is neither operating the train nor yet released from duty, is most often associated with a crew's travel time to their final release point after the expiration of their 12-hour service limit. The time spent awaiting that transportation can be significant and can lead to very long workdays. For example, in June 2004, over 42 percent of the Union Pacific Railroad train crews in the San Antonio, Texas area spent greater than 12 hours on an assignment, over 24 percent spent greater than 13 hours, and 5 percent (or 760 train crews) spent greater than 15 hours.

As a result of the Macdona accident investigation, on July 20, 2006, the Safety Board recommended that the Federal Railroad Administration (FRA) require railroads to use scientifically based principles when assigning work schedules for train crewmembers, which consider factors that impact sleep needs, to reduce the effects of fatigue (R-06-14). The Board also recommended that the FRA establish requirements that limit train crewmember limbo time in order to address fatigue caused by this practice (R-06-15).

On October 24, 2006, the FRA advised the Safety Board that it lacks the statutory authority to adopt the requirements contemplated by either of these recommendations. Further, the FRA stated that any requirement that the railroads use scientifically based principles in assigning work schedules to reduce the effects of fatigue would almost certainly require that they not comply with the periods established by the Hours of Service Act.

Past FRA responses to fatigue-related safety recommendations have been similar. For example, after examining the fatigue issue across all modes of transportation, on June 1, 1999, the Safety Board recommended that the FRA establish, within 2 years, scientifically based hours-of-service regulations that set limits on hours of service, provide predictable work and rest schedules, and consider circadian rhythms and human sleep and rest requirements (R-99-2). This recommendation was promptly added to the Safety Board's list of Most Wanted Transportation Safety Improvements. However, while the FRA noted that it shared the Board's concern over the effects of fatigue on transportation safety, in its response to this recommendation it also noted that it lacked statutory authority to take the action needed. The Board accepted FRA's interpretation and closed the safety recommendation R-99-2 "reconsidered."

The Safety Board believes there is a need for legislative change that would provide the FRA authority to establish hours of service regulations and to address scheduling practices that affect fatigue.

Hazardous Materials

Following catastrophic railroad accidents in the 1970s, safety mandates, such as shelf couplers, head shields, and thermal protection, improved the performance of tank cars during derailments. Additional improvements have included enhanced accident protection for valves and fittings and requirements that specific hazardous materials, such as environmentally harmful substances, be transported in stronger tank cars.

However, despite these improvements, railroad accidents in the past five years, such as those in Minot, North Dakota; Macdona, Texas; and Graniteville, South Carolina have raised new concerns about the safety of transporting hazardous materials in railroad tank cars. The derailment of a Canadian Pacific Railway freight train near Minot on January 18, 2002, resulted in the catastrophic failure of five tank cars. Each tank car held almost 30,000 gallons of anhydrous ammonia, a poisonous liquefied gas. The nearly instantaneous release of 146,700 gallons of anhydrous ammonia resulted in a toxic vapor plume that was approximately 300 feet thick and 5 miles long. An estimated 11,600 residents of Minot were affected by the toxic plume. One resident was killed, 11 were seriously injured and 322 others sustained minor injuries. Damages and environmental clean-up activities exceeded $10 million. Another 74,000 gallons of anhydrous ammonia were released from six additional damaged tank cars over a five-day period following the derailment.

On January 6, 2005, a northbound Norfolk Southern Railway Company freight train, while traveling through Graniteville, South Carolina, encountered an improperly lined switch that diverted the train from the main track onto an industry siding, where it struck an unoccupied, parked train head-on. As a result of the collision, a tank car filled with liquefied chlorine was punctured and a chlorine vapor cloud filled the area. Nine people died as a result of chlorine gas inhalation. Approximately 554 people complained of respiratory difficulties and were taken to local hospitals. Of these, 75 were admitted for treatment. An estimated 5,400 residents within a 1-mile radius of the accident site were evacuated for several days.

In the Minot accident investigation report, the Safety Board concluded that the low fracture toughness of the steels used for the tank shells of the five cars that catastrophically ruptured contributed to their complete fracture and separation. The Board issued four safety recommendations to the FRA: conduct a comprehensive analysis to determine the impact resistance of the steels in the shells of pressure tank cars constructed before 1989 (R-04-4); based on this analysis, rank the pre-1989 pressure tank cars according to risk and implement measures to eliminate or mitigate their risk (R-04-5); validate the predictive model being developed to quantify the dynamic forces acting on railroad tank cars under accident conditions (R-05-6); and develop and implement fracture toughness standards for steels and other materials of construction for pressure tank cars used to transport liquefied compressed gases (R-04-7). We believe that the development of the predictive model and implementation of fracture toughness standards go hand-in-hand and will lead to tank car designs that can provide improved structural integrity and puncture resistance. The FRA has been responsive to these safety recommendations and, therefore, they are currently classified "open – acceptable response."

In the Graniteville accident investigation, the Safety Board again examined tank car crashworthiness issues. The Board found that the steel in the tank shell of the punctured chlorine car had a fracture toughness that was significantly greater than the fracture toughness of the ruptured tank cars in Minot. The higher fracture toughness in the Graniteville tank car contributed to the relatively quick arrest of the crack even though there was brittle fracture in its outer portions. Because of the improved properties of the steel and increased wall thickness, the Graniteville tank car was among the strongest tank cars currently in service. However, the Board concluded that, as shown in the Graniteville accident, even the strongest tank cars in service can be punctured in accidents that involve trains operating at moderate speeds.

The Safety Board believes that modeling accident forces and applying fracture toughness standards, as recommended in the Minot accident report, will improve the crashworthiness of tank cars. However, because of the time that it will take to design and construct improved tank cars, the Board believes that the most expedient and effective means to reduce the public risk from the release of highly poisonous gases in train accidents is for railroads to implement operational measures that will minimize the vulnerability of tank cars transporting these products. Two research studies have addressed operational measures to reduce the vulnerability of tank cars transporting hazardous materials. The 1992 FRA report, *Hazardous Materials Car Placement in a Train Consist*, concluded that the rear one-quarter of a train is the most desirable location for cars containing hazardous materials and that reducing the speed and size of trains can reduce the number of cars derailed in an accident. The second study, "Minimizing Derailments of Railcars Carrying Dangerous Commodities Through Effective Marshaling Strategies," prepared for the Transportation Research Board, reached similar conclusions and provided some additional statistical information to support those conclusions. Therefore, the Safety Board recommended that the FRA require railroads to implement operating measures, such as positioning tank cars toward the rear of trains and reducing speeds through populated areas, to minimize impact forces from accidents and reduce the vulnerability of tank cars transporting chlorine, anhydrous ammonia, and other liquefied gases designated as poisonous by inhalation (R-05-16).

On October 24, 2006, the FRA responded that the railroad industry works to reduce risk through their "key train" program and other means. The key train program, which is a composite of the number of tank cars and types of cargo hazards, does include a 50 mph maximum train speed. However, the Board notes that the train involved in the Graniteville accident did not meet the industry's definition of a key train and it was actually operating less than 50 mph when the accident occurred. The FRA response noted that the actions called for by safety recommendation R-05-16 would be contrary to railroad safety and would result in significant costs to the railroad industry that could not be justified under any circumstances. Although the FRA notes that it will continue to examine this issue, the Board is disappointed in the lack of FRA action to reduce the vulnerability of tank cars carrying poisonous inhalation materials through operational measures.

Positive Train Control

Since 2001, the National Transportation Safety Board has investigated 28 railroad and 3 rail transit accidents involving train collisions and over-speed derailments. Most of these

accidents occurred after train crews failed to comply with train control signals, failed to follow operating procedures in non-signaled (dark) territories, or failed to comply with other specific operating rules such as returning track switches to normal positions after completing their work at track sidings. Our accident investigations have identified human performance failures related to fatigue, medical conditions such as sleep apnea, use of cell phones, use of after-arrival track warrants in dark territory, loss of situational awareness, and improperly positioned switches.

Although the Safety Board has made numerous safety recommendations to address specific human performance issues, we have repeatedly concluded that technological solutions, such as positive train control systems, have great potential to reduce the number of serious train accidents by providing safety redundant systems to protect against human performance failures. As a consequence, positive train control has been on the Safety Board's list of Most Wanted Transportation Safety Improvements for 17 years.

The issue was highlighted in 2002 when a freight train and a commuter train collided head-on in Placentia, California. As a result of the investigation of this accident, the Board reiterated the need for positive train control systems, particularly on high-risk corridors where commuter and intercity passenger railroads operate. Most recently, the Board found that the lack of a positive train control system contributed to a commuter train derailment in Chicago, Illinois in 2005 that killed two passengers. The train derailed as it traversed a crossover from track 2 to track 1 that had a prescribed operating speed of 10 mph. The train was traveling 69 mph as it entered the crossover.

Since the Safety Board held a symposium on positive train control systems in March 2005, the Board notes that several railroads have taken positive action toward the development and implementation of these systems. Last year, the presidents of BNSF Railroad and Norfolk Southern Railway Company freight railroads and the executive director of Northeast Illinois Regional Commuter Railroad (Chicago Metra) passenger railroad announced that it was time for the industry to move forward on positive train control systems. On January 8, 2007, the FRA announced its approval of a positive train control system for a major railroad over 35 specific freight lines in 17 states. The Board is encouraged by these recent developments. We are pleased to see the FRA's announcement and agree this technology will pay great dividends in terms of lives saved and injuries prevented.

Mr. Chairman, this completes my statement, and I will be happy to respond to questions at the appropriate time.

Opening Statement of Representative Tim Walz (MN-01)

Subcommittee on Railroads, Pipelines, and Hazardous Materials

Tuesday, January 30, 2007

Madam Chairwoman, members of the Committee, and guests, let me say that I am truly honored to serve on this subcommittee. I am eager to examine the rail, pipeline, and hazardous material issues that face our country today.

Rail safety is an extremely important issue to my constituents, and I will work to ensure that an effectively overseen rail industry is operating on safe tracks that will protect train operators, passengers, and bystanders. Just last November a train derailed near Courtland in my district, spilling 30,000 gallons of ethanol. We need to make sure these kinds of accidents happen less and less.

I also intend to use my position on this committee to raise awareness of another issue important to constituents back in my district: the DM&E railroad expansion. This proposed project would have a significant effect on the economy, environment, and quality of life in southern Minnesota. This committee must ensure that this and future rail projects are debated in a process that yields safety, accountability, and transparency. As a steward of the taxpayers, I owe them nothing less than an open, honest discussion of the merits of such projects.

Again, I want to express my eagerness to work on this subcommittee. I look forward to a busy and informative year. Thank you.

Statement of Steve Larson, Executive Director
California Public Utilities Commission
before the
U.S. House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines and Hazardous Materials
January 30, 2007

Madam Chairwoman and Members of the Subcommittee:

My name is Steve Larson and I am Executive Director of the California Public Utilities Commission ("Commission") and have served the state as Chief Deputy of the Department of Finance, Executive Director of the California Energy Commission, and, for seventeen years, Chief Consultant to the California State Senate Budget Committee. I have also served as Chief Consultant to the Senate Utilities and Rapid Transit Committee, Consultant to the Select Committee on Rapid Transit, staff to the Assembly speaker for energy issues, and staff in both the California Senate and Assembly Offices of Research for energy and transportation issues.

Thank you for the opportunity to submit this testimony regarding the State of California's problems with the Federal Railroad Safety Act of 1970 ("FRSA") and the need to revise the FRSA to ensure that it does not preempt all state rail safety laws.

The purpose of my testimony is to urge Congress to revise the FRSA to allow the States to protect their citizens by ensuring safe rail operations. The FRSA, as currently written, contains an express preemption provision which has led federal court judges to find that the FRSA preempts state law in many, if not all, railroad safety cases. Federal courts have preempted every attempt by the States to require rail safety provisions where the Federal Railroad Administration ("FRA") has not acted. The federal courts have accepted the railroads' argument that Congress' intent in passing the FRSA was primarily to create uniform national regulations rather than ensuring that gaps in such federal regulations are filled by state regulations. Of course those state safety regulations would have to be (1) entirely consistent with the FRA's regulations and (2) not "an undue burden on interstate commerce". See: 49 U.S.C. § 20106.

Proposed Change to 49 U.S.C. § 20106

California recommends that Congress put an end to federal preemption of the *entire* field of railroad safety by deleting subsection (1) of 49 U.S.C. § 20106.

> § 20106. National and state uniformity of regulation
>
> Laws, regulations, and orders related to railroad safety and laws, regulations, and orders related to railroad security shall be nationally uniform to the extent practicable. A State may adopt or continue in force a law, regulation, or order related to railroad safety or security until the Secretary of Transportation (with respect to railroad safety matters), or the Secretary of Homeland Security (with respect to railroad security matters), prescribes a regulation or issues an order covering the subject matter of the State requirement. A State may adopt or continue in force an

> additional or more stringent law, regulation, or order related to railroad safety or security when the law, regulation, or order--
>
> ~~(1) is necessary to eliminate or reduce an essentially local safety or security hazard;~~
>
> (2) is not incompatible with a law, regulation, or order of the United States Government; and
>
> (3) does not unreasonably burden interstate commerce.

Support for the Proposed Change to 49 U.S.C. § 20106

The California State Legislature (SJR 13), NARUC, the National Conference of State Transportation Specialists (NCSTS), and the Federal Railroad Administration's Association of State Railroad Safety Program Managers have all endorsed resolutions in support of these modifications to FRSA recommended by the California Public Utilities Commission.

California's Proposed Safety Rules And Court Cases

A catastrophic derailment and toxic spill occurred at the Cantara Loop (curve) near Dunsmuir, California, on July 14, 1991. The train spilled metam sodium into the Sacramento River, which killed all aquatic life in the river and vegetation along the banks 40 miles down river from this accident.[1] On July 3, 1997, a Department of Fish and Game representative stated,

> [The] Sacramento River ecosystem will never recover from the 1991 spill. We've learned from our natural resource damage assessment that some invertebrate species were completely extricated from the river six years ago including several species that were previously unknown to science.[2]

In addition, several hundred persons were exposed to contaminated river water and/or to toxic fumes necessitating medical treatment. The Commission initiated an extensive and thorough investigation into the accident. *Re Southern Pacific Transp. Co.,* 57 Cal. PUC 2d 386, 400-401 (1994), 1994 Cal. PUC LEXIS 1202, pp. *48-*53. The CPUC also determined that Southern Pacific Railroad ("SP") "knew or should have known" of the likelihood of derailment of the train the night of July 14, 1991, because of its unsafe configuration (make-up).[3] Since the FRA does not regulate train make-up, the FRA could not, and so did not, cite the SP for any violation in the Dunsmuir derailment.[4]

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[1] "We decline to determine whether environmental consequences can ever be considered in determining whether a condition is an 'essentially local safety hazard' because in this case they clearly cannot be." *Union Pac. R.R. v. Cal. Pub. Util. Comm'n*, 346 F.3d 851, 862 (9th Cir. 2003).

[2] Statement of Mark Stopher, California Department of Fish and Game, Northern California Region, July 3, 1997, at the CPUC's *en banc* (Full Panel) hearing in R.93-10-002.

[3] Ibid.

[4] Id. at 404.

The Commission determined that statistically, trains derail here at "a rate eight times higher than on the rest of this line."[5] The chance of such numbers of derailments occurring randomly at the site are "extremely small . . . less than 1 in a trillion." (Id. at 196) An operational analysis of the site also supports the conclusion of "unique hazards" since the loop has "the most severe operating conditions" within the overlapping "essentially local safety hazard site" and has the steepest grade on the Shasta Line. (Ibid.) Furthermore, "[t]he 14 degree curve in the Cantara Loop is the sharpest curve on Class I main line track in the state."[6]

The Commission relied on the U.S. Supreme Court's interpretation of the double savings clauses to federal preemption under 49 U.S.C. § 20106, to find the steepest grade with the sharpest curve over one of two major water sources in the state (the Cantara Loop) "an essentially local safety hazard". In *CSX Transp., Inc. v. Easterwood*, 507 U.S. 658 (1993), the Supreme Court determined that "the term 'covering' in the statute 'displays considerable solicitude for state law in that its express pre-emption clause is both prefaced and succeeded by express saving clauses.'" (Id. at 665) This standard for preemption is "not an easy [one] to meet." "In *Easterwood*, the Court made clear that in light of the restrictive term 'cover' and the express savings clauses in the FRSA, FRSA preemption is even more disfavored than preemption generally."(Id. at 813)

But, while the District Court upheld the Commission's finding of "an essentially local safety hazard" at the Cantara Loop, the Ninth Circuit Court of Appeals did not. The basis for voiding the finding of "an essentially local safety hazard" by the Ninth Circuit and other Circuit Courts of Appeals has resulted in federal courts (other than the Court in *Union Pacific Railroad et al. v. Calif. Public Util. Comm'n et al.*, 109 F. Supp. 2d 1186 (July 20, 2000)) finding that no "essentially local safety hazards" exist anywhere in the U.S. Because a local safety hazard is one of the three subparts of 49 U.S.C. § 20106, the states virtually have been excluded from railroad safety in the name of "national uniformity".

This result is perverse; the two savings clauses in 49 U.S.C. § 20106, particularly the "local safety hazard" exception to federal preemption, were intended to permit the States to regulate railroad safety.

> "*See* H.R. Rep. 91-1194, *reprinted in* 1970 U.S.C.C.A.N. at 4117 ('The States will retain authority [pursuant to the local safety hazard provision] to regulate individual local problems where necessary to eliminate or reduce essentially local railroad safety hazards.')." (*Union Pacific Railroad et al. v. Calif. Public Util. Comm'n et al.*, 109 F. Supp. 2d. at 1204.)

The Ninth Circuit adopted the test in *Nat'l Ass'n of Regulatory Util. Comm'rs v. Coleman*, 542 F.2d 11, 14-15 (3d Cir. 1976) for determining the existence of a "local safety hazard." A

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[5] Hearings in the *Rulemaking on Commission's own motion to provide for mitigation of local rail safety hazards within California*, Decision No. 97-09-045, R.93-10-002, 1997 Cal. PUC LEXIS 888; 75 CPUC2d 1 (Sept. 3, 1997).

[6] Ibid, "[T]he convergence of these results from statistical and operational methods confirms the soundness of Staff's identification as a local safety hazard site . . . the steepest grade on this line closely coincides with the accident cluster because the steep grade and sharp curvature directly cause one-third of the derailments."

"local safety hazard" is one "not capable of being adequately encompassed within national uniform standards." And since the "federal government could easily and adequately address such [local] concerns" (*Union Pac. R.R. v. Cal. Pub. Util. Comm'n*, 346 F.3d 851, 861 (9th Cir. 2003)), there are none. However, as the District Court noted,

> "The phrase 'not capable of being adequately encompassed within uniform national standards' appears in the legislative history. *See* H.R. Rep. 91-1194 (1970), *reprinted in* U.S.C.C.A.N. at 4117. It is not clear to the Court, however, what this language meaningfully adds to the existing statutory requirements for a local safety hazard. Literally read, the term capable means possible, and it is *possible* to address almost any situation through a national regulation...' Thus, literally read, the language could eviscerate the exception. Given the Supreme Court's direction that the savings clauses deserve 'considerable solicitude,' it would be improper for this Court to inject an additional requirement that would largely if not completely undermine the local hazard exception." (*Union Pacific Railroad et al. v. Calif. Public Util. Comm'n et al.*, 109 F. Supp. 2d at 1204.)

Practically speaking, the courts have not only "eviscerated" Congress' intent but entirely excluded safety involvement by the States in the name of uniformity. Since the FRA is neither large enough nor well-funded enough to fully, adequately secure railroad safety throughout the nation, the result has been continued rail catastrophes and hazardous materials releases such as those in Minot, Minnesota, and Graniteville, South Carolina.

Continuing Rail Accidents in California

May 12, 1989, near San Bernardino, California, at the bottom of the Cajon Pass, a runaway SP train derailed into the Muscoy neighborhood destroying seven homes and seriously damaging four others. Two crewmembers and two neighborhood children, aged seven and nine, were killed. Within days after the derailment, the natural gas pipeline laid in the railroad's right-of-way exploded and ignited (because of damage resulting from the derailment), killing two adults and destroying eleven more homes.[7]

- On July 28, 1991, a Southern Pacific train was involved in a derailment near Seacliff, California. The release of toxic materials led to evacuations, the closing of a highway for approximately five days, and medical treatment for many.
- On December 14, 1994, a runaway train owned and operated by The Atchison, Topeka and Santa Fe Railway Company, collided with a stationary UP train at the Cajon Pass resulting in two injuries and over $4 million damage to railroad property.
- On February 1, 1996, two BNSF crewmembers were killed as a result of another runaway train at the Cajon Pass. In this accident, a toxic cloud of burning chemicals injured over 20 emergency response personnel and forced the closing of Interstate 15 and State Route

[7] See "Devastation," *The New Yorker*, Oct. 22, 1990.

138 for over two days. According to one estimate, the total loss for this accident, including economic losses, at $250 million.[8]

- On January 12, 1997, on the Cima grade near Kelso, California, a UP train with a speed limit of 20 miles per hour lost braking effectiveness and ran uncontrolled at over 70 MPH down the grade derailing 68 of its 75 cars.
- On September 8, 2002, at Colfax, California, a UP freight train derailed 21 cars 3 miles east of Colfax.
- On March 21, 2003, at Cliff, California, a northbound UP freight train was descending a 2.2% grade from Tehachapi towards Bakersfield when eight cars derailed onto their sides. The derailment was a result of a malfunction with the distributed power, which was at the rear of the train, which stopped communicating with the head-end.
- On June 20, 2003 at Montclair, California, 37 cars rolled out of a siding in Montclair onto the main track and continued rolling for 33 miles as a runaway before they were derailed in the City of Commerce. There was substantial property damage to area residents.
- On October 16, 2004, at Pico Rivera, California, an eastward UP freight train operating at 57 mph derailed 11 cars. A precautionary evacuation was ordered as three of the containers indicated that they contained some hazardous materials. Additionally, one residence was destroyed by rail cars that fell onto the house.
- On December 10, 2004 at Niland, California, a UP eastward freight train, operating at 30 mph, collided head-on with a westward freight train operating at 10 mph. As a result of the collision, 1 crewmember was killed and 4 were injured.
- On April 4, 2005, in Slover, California, a northbound UP train was proceeding from the siding to Main Track when 13 cars, including nine Hazardous Materials derailed. During the rerailing process, a leak developed causing the evacuation of approximately 200 citizens from a nearby trailer park near the tracks.

Conclusion

California needs and desires more direct accountability for railroad safety. The railroads have avoided responsibility for disasters that have not been "covered" by federal law. The railroads continue to treat FRA regulations as a cost-of-doing-business. California has a long history of rail safety regulations. Federal preemption as adopted in other areas—precluding state laws that are (1) inconsistent with federal laws or (2) establish an undue burden on interstate commerce—should apply to rail safety. California contends that the essential local safety hazard requirement—which has been used to prohibit States from protecting their property and their citizens rather than as it was intended, to provide a clear basis for the passage of railroad safety regulations by the States—must be modified to fulfill Congress' original intent. California respectfully asks that Congress consider California's recommendation to modify 49 U.S.C. § 20106, so that "national uniformity" no longer trumps safety in railroad operations in this nation.

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[8] Journal of Commerce, (Feb. 22, 1996).

REAUTHORIZATION OF THE FEDERAL RAIL SAFETY PROGRAM

Wednesday, January 31, 2007,

HOUSE OF REPRESENTATIVES, COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, SUBCOMMITTEE ON RAILROADS, PIPELINES AND HAZARDOUS MATERIALS, WASHINGTON, D.C.

The subcommittee met, pursuant to call, at 2:00 p.m., in room 2167, Rayburn House Office Building, the Honorable Corrine Brown [Chairwoman of the subcommittee] presiding.

Ms. BROWN. Good afternoon. The Subcommittee on Railroads, Pipelines and Hazardous Materials will officially come to order.

I want to welcome the members and witnesses to Part 2 of our hearing on reauthorization of the Federal Rail Safety Program. In the interest of time, I will submit my opening statement for the record and reserve my remarks for questioning the witnesses.

But before recognizing Mr. Shuster for his opening statement, I ask unanimous consent to allow 30 days for all members to revise and extend their remarks, and to permit the submission of additional statements and materials by witnesses and members. Without objection, so ordered.

Mr. Shuster?

Mr. SHUSTER. I will follow the Chair's lead and submit my statement for the record, and welcome all the witnesses today, especially the gentleman from North Dakota. Welcome.

Ms. BROWN. I am pleased to welcome Congressman Pomeroy to the hearing this afternoon. The Congressman has spoken with me on numerous occasions about the accident that occurred in North Dakota in 2002. I understand that a witness from the accident flew to D.C. to be with the Congressman for this hearing, and I want to welcome her also. And also my classmate. So welcome.

TESTIMONY OF THE HONORABLE EARL POMEROY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH DAKOTA, ACCOMPANIED BY JEANNETTE KLIER

Mr. POMEROY. Thank you, Madam Chair. It is indeed a pleasure to refer to you in such terms, as well as Ranking Member Shuster, thank you.

I have outlined in this testimony a most extraordinary thing, something that I have not seen before, and that is innocent citizens injured as proximate cause to railroad conduct identified in the National Transportation report, and yet we have a very curious ruling by a Federal District Court that says, there is no remedy for these people, that 30 years ago, and in conflict with, by the way, 30 years of case law thereafter, that there was a complete and absolute immunity rendered to the railroad. That needs to be addressed as the Federal Rail Safety Program is reauthorized.

The facts of this case are really striking. At 1:39 a.m., January 18th, 2002, a Canadian Pacific Railroad freight train derailed near Minot. The freight train derailed 31 freight cars, 15 of them car-

rying anhydrous ammonia. Seven of those cars burst. They sent a vapor plume of anhydrous ammonia about five miles long, two and a half miles wide, spewing into the air. The resulting explosion also blasted a tanker car almost 1,000 feet, took off the wall of a bedroom of a couple at a property close to half a mile away. It operated as a missile, as the anhydrous ammonia spewed out of the tear in that tank.

This vapor plume spread throughout the valley around Minot. The fire department chief told me as they were dealing with the crisis, one of the things that occurred to him is they were going to need an awful lot more body bags.

There were some fortuitous circumstances. It was 2:00 in the morning and it was 20 below outside. So houses were locked up tight and there wasn't a lot of activity, otherwise there would have been in fact, I believe, a very significant casualty count. After the area was cleared, one individual, John Grabinger, had died from the injuries suffered after fleeing his house and becoming disoriented in this opaque, poisonous cloud of ammonia. Thousands of others have suffered injuries, including individuals who sustained second degree burns to their skin. Many people are still suffering long-term effects because they have scarred their lungs, they have damaged their eyes, permanent physical damage. Asleep one minute, next minute, fearing for their lives in some kind of unknown poisonous cloud that has descended over everybody.

The National Transportation Safety Board, July of 2002, released its investigative report into the incident. They found nearly 2000 defects, 2000 defects, along the railway line. However, in March of 2006, a Federal district court dismissed the cases of several victims by ruling that the Federal Rail Safety Act contains a clause stating that States can only adopt or maintain and enforce an additional or more stringent law or regulation or order related to railroad safety under limited circumstances that these individuals cannot have a cause of action because the Federal law had granted a complete immunity to the railroad. A three-judge panel of the Eighth Circuit has upheld this ruling. And five years after this terrible tragedy, these victims have still not received justice.

Madam Chair, I greatly appreciate your also listening directly to one whose life has been upended in this accident, just to establish really for the record the completely unacceptable state of an interpretation of this 30 year old law that says suddenly, railroads have total immunity.

Madam Chair, I yield back, but I am very pleased to have with me a constituent, Ms. Jeannette Klier.

Ms. BROWN. Ms. Klier.

Ms. KLIER. Madam Chairwoman, my name is Jeannette Klier, and I am from Minot, North Dakota, and I am very grateful for the opportunity to speak to you today and represent the citizens of Minot regarding this derailment.

The night of January 18th, 2002 was a cold winter night. Little did I know that when I went to bed that night, I would soon be fighting for my life. A train carrying anhydrous ammonia derailed, spilling seven tank cars of this deadly chemical into the neighborhood. The sound of the derailment woke me from sleep, but it never occurred to me that this was a derailment.

Thinking I was safe, I went back to sleep. A co-worker's phone awakened me and immediately, the smell of ammonia hit me. Following her instructions, I turned on the television for directions. The advice given was to go to the bathroom, turn on the water, put a towel under the door. I did this until I realized that I had inadvertently plugged the sink and the water had run over. This concerned me.

I didn't know if the gas affected a person's ability to think clearly. So I went to the bedroom window and looked out towards the street, which had a street light. And what I saw scared me even more. This cloud was dense, swirling, greenish in color. It did not resemble fog. It was very noxious, and it burned to breathe. It was so thick that I was not able to see across the street.

So I listened. And what I heard was unsettling. It was totally quiet. I didn't hear the sound of traffic. There were no sirens. And I knew that if there were going to be a rescue, the ambulances would be roaring past my house.

This meant that it was too dangerous for rescue. It occurred to me that everyone might be getting overcome by this terrible gas, and that I too might be overcome and die right here. Then I considered that this might be a flammable gas. I just didn't know.

So I knew that I had to make a careful and quick decision to stay and possibly die or to evacuate and possibly die. The odor was very intense in the house. So I decided that if I was going to die, I was going to die trying. I decided to evacuate.

As quickly as possible, I threw on some clothes, grabbed a water bottle and a wet towel, took one last look at my kitchen, which was hazy with gas, put the wet towel over my nose and mouth and stepped out into the garage. It was stronger there. Moving as quickly as I could, I backed out of my driveway and proceeded down the street. But the anhydrous was so thick it was as if somebody had put a white sheet over my windshield. I couldn't see anything.

I tried to hold the wheel straight, knowing that I could possibly hit a car, but even more, hoping that I wouldn't get hung up on a snow bank, because if I did, I would probably die. This anhydrous was so strong it burned my eyes. It burned to breathe. I was scared, but luckily, I was able to drive out of it. Living in North Dakota in the winter had taught me some blizzard driving skills that I found useful in this situation, as well as having winter survival gear in my car. I evacuated to my parents' home in another town.

The anhydrous initially caused nausea, loss of appetite, just a feeling of sickness all over, as well as intense burning in my nose, throat, trachea, lungs, all of which subsided in time. It was my eyes that sustained permanent damage. They are painful all the time and are only relieved temporarily by prescription eye drops and over the counter lubricating drops. Driving any distance in the winter with the defrost on is almost impossible. And when living in a northern climate, the defrost is necessary.

But I feel fortunate. Many others, like my good friend, Jody Schultz, sustained permanent damage to her lungs. She uses oxygen and nebulizer treatments day and night. She is younger than I am, and this has greatly affected her ability to work.

In January 2006, in Minnesota State Court, after a month-long trial was held for four victims of the derailment, the railroad admitted that it was negligent in causing the derailment, but would not take responsibility for causing the injuries to my eyes, as well as the injuries that the other three plaintiffs sustained. The jury, however, did not agree, and in my case, and in my case, they awarded me $300,000. The railroad is attempting to ignore what the jury had decided. Ultimately, this is not about money. I would much rather have the pain in my eyes go away.

But without the ability to take CP to court, many others will be treated like me. Congress should now act to state again that people have the right to take railroads to court for personal injuries. Without this avenue, the railroads will continue to hurt people and just be able to walk away from the pain they have caused.

I am concerned that this will happen again. The train passes by a grade school. Luckily, this derailment occurred at night and not when school was in session, or the tragedy would have been worse. This accident was not due to an act of nature, but to negligence in track maintenance. Canadian Pacific Sioux Line Railroad needs to be held responsible for the injuries that they have caused to the people in Minot. Injured people need laws to protect them in seeking just recourse through the court system.

Please do all that you can to protect the injured. Mine is one of several hundred stories, some much worse than mine. And even though the railroad has admitted liability for the derailment, they are hiding behind the preemption argument. This may be even the bigger tragedy. This takes away all avenues for people to seek recourse for their suffering and allows CP Railroad to say, too bad, so sad, and go on with their usual business.

This injustice must be rectified. The intent of the FRSA could not have been for this type of interpretation to take away victims' rights. We have to get this law clarified before another accident happens somewhere else in this Country. It is not if, it is when. Don't let the railroads use the preemption defense and use the FRSA as a shield for immunity and deprive victims of their rights.

Madam Chairwoman, if you or any of the other members have any questions, I will try to answer them. Thank you.

Ms. BROWN. Thank you for your testimony.

I have a question for you, Mr. Pomeroy. Before I get into my question, can you explain to me one more time why the rule that kept the group from going to court——

Mr. POMEROY. Yes, Madam Chair. There were different court cases filed. The witness with me was a group filing in State court in Minnesota. In addition to that, there was a Federal case filed, and that was held in Bismarck, at Federal District Court. State court actions proceeding pretty much like State court actions have proceeded ever since 1970 under this Act. The surprising development came out of the ruling of Bismarck, where the District Court said, in spite of the fact that we have 35 years of litigation against railroads, we now hold that the Federal Rail Safety Act really does not afford this kind of State court remedy under State law. Nor by the way is there an existing Federal point of relief for the plaintiffs either. So they are just out of luck. So it was basically, it was a determination of complete immunity for railroads under this Act,

even though that was a very new and novel interpretation, compared to the bulk of case law since that time.

This situation, Madam Chairwoman, we have all had town meetings. We have all had town meetings that have an element of outrage to them, given one circumstance or another that presents itself in this district. I will tell you, I have never seen a meeting like this one which I convened with the victims shortly after the accident. This happened in January of 2002, just a few months after 9/11. They thought that there had been a terrorist attack. We had weeping families in their home as this poison gas started to come in, they could visibly see it, as they said goodbye to one another and wrapped their faces in wet cloths, waiting for the end to come. It came for one man, who was out, got disoriented, hit the garage and couldn't get into the house. But for everyone else, they just carry these scars. There were psychological scars, some have healed, some haven't. But unfortunately, there are a lot of residual scars.

Now, any fundamental notion of American justice is that when the National Transportation Safety Board did their exhaustive investigation, finds all this negligent operation of the rail by the railroad company, that there ought to be someone responsible for this damage. I think really that is the question before this Committee. You can clarify what has been the better than three decades standing in application of this law that yes, nobody gets immunity under this law. That is not what it ever meant. Or on the other hand, you can create a Federal claims system and have some kind of taxpayer pot that pays these people and gives the railroad a free pass. Or I guess the third alternative is you could say, well, Minot, tough.

Most victims have recourse for negligent acts. If you have been hurt by a railroad—we love railroads, and they are important to us, so they do not have any responsibility for their negligent acts. Now, I do not think that that is a position that is going to wash with anybody. So I do put to you, to me the easiest thing to do is just simply clarify Congress' original intent.

I might to our new colleague, Congressman Walz, these tracks, by the way, they come on into Minnesota, the CP Rail. So the same entity operating the system in Minot also operates trackage in Minnesota.

Ms. BROWN. Let me just ask, and you just answered part of my question, but as the Subcommittee plans for reauthorization of the Federal Rail Safety Program, what areas are most in need of revision or reform? And I just heard you, but do you want to add something else to that?

Mr. POMEROY. No, just to try and put a fine point on it. I don't think, in 1970 or at any point thereafter, there was Congressional intent for granting immunity to railroads under this Act. So as it is reauthorized, clarification, just a restatement of what has always been legislative intent here, in my opinion, would be helpful.

Ms. BROWN. OK. Mr. Shuster.

Mr. SHUSTER. Thank you.

And this was the only case in 30 some years that a ruling came down like this? There are other accidents that have occurred, and lawsuits and damages.

Mr. POMEROY. There have been plenty of actions. I am sorry, I didn't mean to interrupt you.

Mr. SHUSTER. Well, this is the main case? That's the main point of my question, this is the only case in 30 years that there were no damages assessed?

Mr. POMEROY. I can't give you an exhaustive legal opinion, because I don't know. But I am aware, as my colleague is aware, there have been a lot of lawsuits against railroads over the years, crossing accidents seems like present maybe the largest number. But there have been any number of them for negligent operation of the railroads.

Now we have a Federal District Court in North Dakota ruling, this never should have happened, because the original 1970 Act really granted them immunity. It is a very novel ruling. It flies in the face of what has been kind of generally understood actions. To show you how generally understood it is, the Railroad Council themselves were settling some of the cases. They were litigating other cases. The railroad did not at any time act as though they had complete immunity until the Federal judge ruled.

But there have been two other cases where other members are troubled about this recent trend of ruling. There was a case in Scotts Bluff, Nebraska. And I have talked about this matter with Senator Lindsay Graham, who is also very disturbed about plaintiffs in South Carolina being denied. So I am not going to say this is the only time it ever happened. I don't have a comprehensive knowledge of it, but I believe that this trend of ruling is very recent, and I am only aware of those three instances, South Carolina, Nebraska and North Dakota.

Mr. SHUSTER. And that was a Federal court where this ruling came down?

Mr. POMEROY. Correct.

Mr. SHUSTER. Thank you very much.

Mr. POMEROY. Thank you.

Ms. BROWN. Thank you very much for coming. I thank you, Ms. Klier. We will be working through these issues as we move forward with the reauthorization. Thank you.

Mr. POMEROY. Thank you very much.

Ms. BROWN. We will now proceed with Panel 2. Before we proceed, is the tape ready?

Mr. HAMBERGER. I believe it is, yes, ma'am.

Ms. BROWN. We do not have any popcorn or sodas, but we are going to watch a two-minute film, and then we will start the testimony.

Mr. HAMBERGER. Actually, we have it worked into the script.

Ms. BROWN. Well, first of all, let me welcome you all here. And we have Mr. Hamberger, who serves as President of the Association of American Railroads. Next is General Timmons, who is the President of the American Short Line and Regional Railroad Association. We have Mr. Wytkind, who is President of the Transportation Trades Department of the AFL-CIO. And we have Mr. Rodzwicz, who is the Rail Conference Director for the International Brotherhood of Teamsters. He is here representing the Brotherhood of Local Engineers and Trainmen, and the Brotherhood of Maintenance of Way Workers. And finally, Ms. Sharon Van Dyck, who is

an attorney from Minnesota, representing the American Association for Justice.

We are pleased to have all of you here with us this morning. Your full statement will be placed into the record. We ask that all witnesses try to limit their testimony to a five minute oral summary of their written statement as a courtesy to all of the witnesses. We will proceed in the order in which the witnesses are listed in the call of the hearing.

Mr. Hamberger.

TESTIMONY OF EDWARD R. HAMBERGER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, ASSOCIATION OF AMERICAN RAILROADS; RICHARD F. TIMMONS, PRESIDENT, AMERICAN SHORT LINE AND REGIONAL RAILROAD ASSOCIATION; EDWARD WYTKIND, PRESIDENT, TRANSPORTATION TRADES DEPARTMENT, AFL-CIO; EDWARD W. RODZWICZ, PRESIDENT, TEAMSTERS RAIL CONFERENCE; SHARON L. VAN DYCK, AMERICAN ASSOCIATION FOR JUSTICE

Mr. HAMBERGER. Madam Chairwoman, thank you very much. Let me add my words of congratulations to those you received yesterday on your ascendancy to the Chairmanship of this Subcommittee. We appreciated the opportunity to work with you in your position as Ranking Minority Member and look forward to working with you as Chairwoman.

At the same time, to Mr. Shuster, congratulations on your election and appointment as Ranking Member on this important Subcommittee. And welcome especially to Mr. Lipinski, with whom we have worked on Chicago issues, and Mr. Walz, to this Subcommittee.

On behalf of the members of the Association of American Railroads, let me before I start make some comments about the testimony we just heard. I would like on behalf of the industry to offer my regrets and the entire industry's regrets to Ms. Klier for the suffering she went through. I think that in addition to the issue which she and Mr. Pomeroy raised, it raises a number of issues with which this Committee and Subcommittee have wrestled over the past couple of years regarding the transportation of hazardous materials, particularly toxic by inhalation hazardous materials, the common carrier obligation that the railroads have, and the liability that they have. So I think it is something that we need to take a close look at in the context of all of those issues. But again, our regrets and best wishes to her, and I thank her for coming here today, because I know it is a long way to come from North Dakota to bring her issues to the attention of the Subcommittee.

I am going to run over, I can tell right now. May I ask permission to begin now?

Ms. BROWN. As much time as you may consume.

Mr. HAMBERGER. Thank you very much, Madam Chairwoman.

On behalf of the members of the AAR, thank you for this opportunity to address railroad safety. Nothing is more important to the industry than safety. It is the focus of many of our investments, it is the focus of many of our research and development programs. It is the focus of our employee training, and it is the focus of our operations.

We are very proud of our safety record. Our industry has become much safer over the years. Between 1980 and 2005, railroads reduced their overall train accident rate by 64 percent, and their rate of employee casualties by 79 percent. Not coincidentally, this record of safety improvements began with the passage of the Staggers Rail Act of 1980, which partially deregulated the industry. Deregulation provided railroads with additional resources that were invested in maintaining and improving track, equipment and signal systems. In fact, through last year, the industry has invested over $370 billion in the last 27 years to improve its operations.

I am pleased to say that that safety record continues to improve. Preliminary data for the first 10 months of last year indicate that 2006 could well be the safest year ever for the railroads by the three most commonly cited rail safety measures: the train accident rate, the employee casualty rate, and the grade crossing collision rate.

But let's put that in context, because Mr. Gonzalez yesterday asked a very pertinent question: you're safer, but compared to what? And as you can see from this chart, from my written testimony, railroads are not only safer than in the past, but they are safer when compared to injury rates of all other modes of transportation and in fact, most other industrial groups, including agriculture, construction, manufacturing and private industry as a whole. Available data also indicate that U.S. railroads have employee injury rates well below those of most foreign railroads.

In addition to the dedication and professionalism of the industry's employees—and I want to emphasize that—the dedication and professionalism of the industry's employees—-credit for the industry's safety record must also go to the use of new and safer technologies. We have many of these deployed under a program we refer to as advanced technology safety initiatives.

The Subcommittee saw many of those during its two hearings last year in Pueblo, Colorado. Some of them include wheel profile monitors that use lasers and optics to capture images of wheels, trackside acoustic detectors and a rail defect detector car to detect internal rail flaws, using laser technology. Taken together, these technologies produced a 13 percent reduction in the rate of broken wheel and broken rail accidents in its first 25 months.

I know this is a matter of great concern for Congresswoman Napolitano. I want to assure her that we are working very hard in this area.

As discussed yesterday, the greatest challenge to improving safety lies in the area of grade crossing accidents and trespassers. I want to thank this Committee for its leadership in expanding funding for the Section 130 grade crossing program in the SAFETEA-LU bill. As you know, that program funds separation and signalization of grade crossings around the Country. As you can see from the 2006 data, this is already having a positive effect.

You asked yesterday, Mr. Shuster, what causes these grade crossing accidents. The most recent study, a 2004 FRA report to Congress, confirms that over the previous 10 year period, 94 percent of public grade crossing accidents were caused by "risky driver behavior or poor judgment." We have an example of two such accidents on the monitor. I would like to point out that you will hear

some comments from the crew. These are old tapes from Norfolk Southern. Norfolk Southern has since relocated the microphone outside the cab to address crew concerns.

But the first one you will see, we are actually going to show it twice, first in real time, if you keep an eye on the left hand side of the track, you will hear the whistle blow by the way. It's going 31 miles an hour.

[Video.]

Mr. HAMBERGER. You hear the whistle. Watch the second car on the left. The gates are down.

[Video.]

Mr. HAMBERGER. We will see it again in slow motion, as he went around the car in front of him.

[Video.]

Mr. HAMBERGER. The second one is at a passive grade crossing where the driver, fortunately this was not a fatal accident, came, stopped too late, did not look and drifted into the right of way. If we showed you that again, you would see that there was no stop sign there. Fortunately, the Federal Highway Administration is changing its recommendations to the States to put yield or stop signs at all passive grade crossings.

Madam Chairwoman, I spoke to one of your constituents yesterday from the Jacksonville school district, and she indicated a great deal of interest in having Operation Lifesaver volunteers come to her school district to explain the importance of stop, look and listen. We will make sure that that happens, working through your office.

Finally, I want to address what may have been a mis-impression left with this Committee by Mr. Scovel, the Department of Transportation Inspector General, when he spoke about reporting accidents at grade crossings. What he did not tell you was that in a November 28th, 2005 audit of the FRA by his office, his staff wrote, "The 115 unreported crossing collisions that were not reported to the National Resource Center were reported to the FRA within 30 days as required by law." So I want to emphasize that the railroads did in fact make the report. They made it to the FRA and not to the National Resource Center.

His office went on to find: "FRA officials also stated that railroad employees were confused about which collisions to report to the NRC as opposed to which ones to the FRA. Their confusion contributed to missed reports. We found the reporting requirements to be complex and potentially confusing as well."

Consequently, his office went on to make a recommendation to the FRA, "In our opinion, to avoid confusion over the reporting requirements for railroads, FRA must clarify its requirements for reporting collisions to the NRC." And as you heard yesterday from Administrator Boardman, they have since done that, and in fact, Mr. Scovel testified that a similar audit in the first 10 months of 2006 found that only 12 accidents out of almost 3,000 investigated resulted in a missed report of that accident. That is way below the 21 percent which he talked about yesterday.

So I would say from the standpoint of trend analysis, 12 out of 3,000, that number is statistically insignificant, and that in fact, I believe that issue has been satisfactorily resolved.

Thank you for the opportunity to testify on rail safety. The industry is committed to working with you, the FRA, our employees, and our customers to ensure that railroad safety continues to improve. I appreciate your indulgence, Madam Chairwoman, in letting me run over time.

Ms. BROWN. Mr. Timmons?

Mr. TIMMONS. Good afternoon, Madam Chair. Let me offer my congratulations also to you and Mr. Shuster. It is a pleasure to see you both in those positions and I look forward to working with you in the future.

I appreciate the opportunity to appear this afternoon on behalf of the American Short Line and Regional Railroad Association. Nationwide, there are over 500 short lines, operating nearly 50,000 miles of railroad, employing over 23,000 individuals. Twenty-five of the 30 members of this Subcommittee have one or more short line railroads operating in their district.

As has been said many times this afternoon, there is nothing more important to the success of railroading than safety. To short lines, it is not only good business, but it is a personal matter. Short lines are small companies, where every individual is well known to the other. Mr. Hamberger cited the considerable improvement in the railroad industry safety data. I am pleased to say the short line industry has contributed to that improvement.

According to FRA data, in the five year period from 2001 to 2005, the short line industry's total number of injuries has declined by 26 percent. If you bump that through October of 2006, the number increases to 40 percent. So in the brief time I have, let me make three points.

First, this is a hearing concerning the reauthorization of the Federal Rail Safety Program. I should start by saying that the short line railroads are generally very satisfied with the operation of this program. We believe the law itself and the administration of that law by the Federal Railroad Administration has made a significant contribution to the safety of the industry.

Having said that, we do disagree with the FRA's newly proposed provisions to revise the schedule of civil penalties, which will approximately double fines for safety violations. We have submitted comments on this subject to the FRA, and I will not repeat those here, other than to say that we believe the agency should adopt a sliding scale of penalties. Track violation penalties, as an example, could be based on track classification. Other categories of violations could similarly have an adjustable scale for us.

Our railroads operate at much lower speeds and much lower densities, and thus have a much lower accident severity risk than the Class I railroads. To double fines under the current system is unreasonable and would impose a significant hardship on small railroads that is unjustified, considering our operations and safety record. Additionally, a fine-doubling policy clearly deviates from the FRA's policy statement concerning small entities in CFR 49 Part 209, where the FRA recognizes the special needs of Class II and Class III railroads.

Secondly, we believe that the most important thing a short line railroad can do to improve safety is to improve its track. As you know, the short line industry inherited the worst of the Nation's

track infrastructure when we began taking over these properties in the 1980's. Today's short lines plow almost a third of their annual revenues back into infrastructure improvements. That is more than any other industry in the Country. Beginning 2005, we have been able to increase that investment, thanks to the rehabilitation tax credit that so many of you were helpful in securing. As our track improves, our safety record will improve. We think the statistics I mentioned earlier bear that out.

Our three year tax credit expires at the end of 2007. And we are seeking a three year extension. Twenty-five of the 30 members of this Subcommittee were co-sponsors of our original tax credit legislation and we hope you will do so again. Of the remaining six, five are new members, and did not have an opportunity to co-sponsor. We hope they will consider doing so at this time.

Third, I would like to briefly address the issue of hazardous material. Almost to a company, we would prefer to give up this traffic. We cannot adequately ensure the risk, and for most short lines, a single accident means going out of business. In the majority of cases, the short line does not even set the rate, so there is virtually no relationship between what we earn and the risk we assume.

Compounding the rate inadequacy problem is the fact that for short lines, the cost to insure one car is just as much as it would be for 100. I fully understand how difficult this issue is for the Congress. There is strong special interest opposition to a meaningful cap on any liability. Neither the producers nor the end users are willing to pay the real price associated with this transportation and would vigorously and probably successfully oppose any such proposal in the Congress.

But the fact remains that some day there will be an accident on a short line railroad. Ultimately, that railroad will be put out of business. When that happens, many more short line railroad owners will decide that the risk is too great and will throw in the towel, to the detriment of the communities and the shippers they serve throughout the Country.

We believe that a realistic solution to this problem will involve some combination of a limit on liability, a greater assumption by the cost by the producers and end users, and perhaps some kind of Government insurance program that assumes the risk above a certain level. Possibly the Price-Anderson mechanism may be the most reasonable solution. For that to work for short lines, there needs to be some kind of bridge between our company insurance and what will undoubtedly be a much higher liability limit under the new mechanism.

So I strongly urge this Committee to vigorously pursue a solution before, not after, a crisis occurs. The short line industry certainly stands ready to make whatever modest contribution we can to crafting a solid solution. So I appreciate the opportunity this afternoon to appear here, and would be pleased to answer any questions that you might have at the appropriate moment.

Thank you, Madam Chair.

Ms. BROWN. Thank you, Mr. Timmons.

Mr. Wytkind.

Mr. WYTKIND. Madam Chair, thank you for inviting Transportation Labor to appear before you today. And to all the members

of the Subcommittee, I appreciate the invitation to appear before all of you. I too congratulate you, Madam Chair, for your rise to the chairmanship of this Subcommittee. We have a lot of confidence that rail workers' voices will be considered as you deliberate over rail safety and the number of other initiatives before this Subcommittee.

It is no secret that reauthorization of rail safety legislation is so long overdue. It is frankly outrageous that because of the opposition of the railroad industry, every attempt to pass authorization has been blocked for over a decade. Fortunately, it appears this Committee is now poised to act on much-needed changes to our Federal rail safety laws.

The reason behind the delay has been real simple: stonewalling and political gamesmanship up on Capitol Hill by the railroad industry and its lobbyists. It is plain wrong to have the railroad safety laws of this Country held captive to special interest lobbyists of the railroad industry. I think it is time now to take a serious look at what has happened in the last 10 to 12 years that needs to be changed through very vigorous enforcement and oversight by our Government and by Congress.

I reject the proposition that the railroads have been advancing now for over a decade, which is that which they agree to should be implemented by the FRA through their joint rulemaking procedures with the railroad unions and everything else should be scrapped. That is essentially the position they have been taking since the Federal Railroad Administration and the DOT tried to enact a number of rail safety initiatives in the 1990's, which were also blocked by the rail industry.

We have offered a number of proposals, but I will only summarize a handful of them, for purposes of today. We believe first and foremost that railroads must be held accountable for their conduct and must face not only aggressive enforcement action but also robust fines when they skirt their responsibility to run safe railroads and protect their workers. We must combine those enforcement tools with strong whistleblower protections for employees. Safety and security training must be mandated, because the industry is not performing those functions.

Chronic fatigue must be addressed in any legislation. And we believe that the use of technology, including off the shelf signaling technology, can finally rid the rail network of many of its hazards, including so-called dark territory, which is unfortunately prevalent in the industry and is threatening public and employee safety around the Country.

First, regarding enforcement measures. It is a fact that for every violation the railroads are levied with, they pay on average $30. That is hardly a penalty that matches the crime, so to speak. We believe that the penalties must reflect the seriousness and the volume of the safety violations.

Second, as a companion to these enforcement tools, harassment and intimidation in the railroad industry must be put to a stop. I have been talking about this for over a decade before this Committee and before the Senate Commerce Committee. The employees in the railroad industry are harassed and intimidated into not speaking up about safety problems. It is a culture that has been

around for decades. It is something that the railroad industry and its representatives like to basically gloss over and ignore and make you believe they do not exist. But they do. And we believe it is a serious issues in trying to deal with safety and security threats in the industry. No worker should have to choose between his or her job security and the safety of the system.

Third, training is not being done at the level it should be. It must be mandated in the legislation. And staffing shortages should at least be looked at by the Committee to make sure that the staffing needs of the industry are being met to meet the safety priorities of the Country.

For years, we have listened to rail industry claims about all the training that takes place. It is not happening. I am told instead that these workers are overworked, understaffed and ill-equipped to manage the capacity crunch that plagues the system. I hear about new hires not keeping pace with an aging work force. I hear about a condensed, one size fits all training program, because there is not time to train the new hires. I hear about new employees resigning in droves because of the lack of quality of the job and the training, and because of their lack of preparedness for the job, because of the railroad's inattention to those issues.

In short, the FRA must be compelled to require strong training programs. Separately, on the security side, the same problem exists. Since 9/11, I have been talking personally about this and all of our unions have. Our members are not being trained to deal with security threats. No matter how many glossy overheads, no matter how many nice brochures get put out, no matter how glossy the curriculum looks, they are not getting trained. And until they are trained, we have a railroad industry that is exposed to security risks and threats, and it has a workforce that is not ready to deal with those threats in a head-on fashion. Showing low budget security videos for 20 minutes hardly constitutes real security training.

Finally, on fatigue, I know you are going to hold a hearing and maybe a series of hearings on it, but I must address a couple of points. In the McDonough, Texas collision, where a hazmat release ensued and three deaths occurred, the worker on duty was very clear about the fact that he couldn't come on duty, because he was tired. He tried to take a day off for rest. Instead, he got two hours sleep right before that accident occurred.

This is the kind of story that is going on all over the railroad industry. Other workers are being pushed to the brink. It is not unusual for the railroads to game the Hours of Service Act and for workers like signalmen to work as much as 18 or 20 hours in a 24 hour period. Something has to change, and I think this legislation has a chance to deal with fatigue problems in the industry.

I will conclude, Madam Chair, I have many other things I could talk about and I will. But I will end with a quick story in Illinois. I apologize for going over as well. But in Illinois recently, rail employees and their unions attempted to pass a reasonable safety piece of legislation that dealt with the lack of prompt medical attention for rail workers. The bill enjoyed strong bipartisan support at the State level and the State legislature. The Illinois house passed it.

The senate then took up a compromise bill that the railroads negotiated with the unions and the politicians and the State. The State senate passed the bill with the expectation that the State of Illinois would not get objections from the railroad industry.

Well, before that train left the station, the railroads reneged on the deal. They filed suit in Federal court and they overturned the very legislation that they agreed to and in fact helped to write.

I make this point only because this is exactly the kind of stonewalling we have been dealing with at the Federal level for over a decade. No matter what the initiative is, if it tells the railroads what to do, when to do it and how to do it, they say no. They say no all the time. They don't just say no, they say, hell, no. And until the Committee and the U.S. Congress decides it is time to pass rail safety legislation over the objections of the rail industry, it is going to be very difficult to achieve it.

But I have a lot of faith in you, Madam Chair, and in the full Committee Chairman, Mr. Oberstar, who has just joined us, and in all the members of this Committee, that we are going to finally get a chance to deal with the rail safety crisis that we think we have in this Country.

Thank you, and I appreciate the time you have afforded me.

Ms. BROWN. Thank you.

Mr. Rodzwicz.

Mr. RODZWICZ. Good afternoon, Madam Chairwoman, Mr. Ranking Member and Subcommittee members.

As president of the Teamster Rail Conference, and on behalf of more than 70,000 men and women we represent, made up of the Brotherhood of Locomotive Engineers and Trainmen, and the Brotherhood of Maintenance of Way Employees, thank you for holding today's hearing and providing us with the opportunity to give you our views on reauthorization of the Federal Rail Safety Program.

Safety is a vital concern to our members who place their lives on the line every day in order to transport the people and the goods that keep our economy running. In the last six months, seven railroad workers have been killed in the line of duty. That result is unacceptable to the Rail Conference. I challenge the FRA and the industry to move forward immediately and decisively to correct the causes of those tragic deaths.

BLET and BMWED both are proud members of FRA's Railroad Safety Advisory Committee, and have served since RSAC's inception in 1996. We believe that with some significant exceptions, we have made progress improving rail industry safety, because of consensus based rulemaking under the RSAC process. And, although we don't always agree with them in the end, we appreciate the respect and consideration we receive from AAR and the Short Line RSAC partners.

We are also proud of our relationship with the FRA. We believe that the FRA's performance strongly warrants a multi-year reauthorization of the Federal Rail Safety program, so that we can proceed in an orderly fashion in the years ahead. Reducing accidents and injuries related to human factors cannot happen if we focus solely on the person who is closest in place and time to an accident. Rather, comprehensive accident prevention and safety enhance-

ment must also include continuing study of and adjustment to the work environment as a whole.

For this reason, we believe the Federal Rail Safety Program needs to address a number of issues to complete the circle to ensure employee safety. I will briefly identify some of them in no particular order of significance.

Fatigue continues to be a major concern for us. Operating crews in freight service for the most part work on an unscheduled operation. At minimum, we need to address fatigue for operating crews by one, counting limbo time as hours of service; two, requiring a ten hour calling time, so people can have adequate opportunity to rest before reporting for work; and three, implementing basic, concrete fatigue counter-measures. At a minimum, operating employees should be permitted to request rest when an individual believes it is needed for a safe operation.

Causes of maintenance of way worker fatigue also require additional study and counter-measures must be adopted. Maintenance of way workers are often required to travel hundreds of miles to report to work sites on their days off. These same workers are also the only rail workers who are expected to obtain adequate rest in multi-person occupancy lodging. On Norfolk Southern, for example, many employees in such service are forced to sleep eight people to bunk cars, not provided with potable water and forced to use outside toilets. These conditions on NS are intolerable, and the entire treatment of maintenance of way workers needs substantial improvement.

We know that track caused derailments account for approximately one-third of all rail accidents. Railroads are not hiring and retaining a sufficient number of employees to adequately maintain the Nation's rail infrastructure. Staffing levels have been reduced by nearly two-thirds over the past 25 years. While some of this decreased can be attributed to improved technology and greater work productivity, the fact remains the existing track force levels are insufficient for the task at hand.

Madam Chairwoman, may I have additional time to complete my testimony?

Ms. BROWN. Yes, sir.

Mr. RODZWICZ. Thank you.

The lack of manpower causes the Nation's rail infrastructure to maintained in a reactive, rather than a proactive mode, putting other rail employees and the communities near rail lines at greater risk for injuries caused by track related derailments.

Also on the subject of staffing and safety, I want to repeat something to you that you have heard from the Rail Conference and from our divisions in the past: we fully support development and deployment of positive train control. PTC is a safety overlay on the top of existing signal and train control systems and can provide each and every Rail Conference member with an important added margin of personal safety.

However, we oppose implementation of PTC simply as a means of reducing crew size, because trading a set of known risks for a set of unknown risks will jeopardize public safety and the safety of our members. Increased individual worker liability and the testing and implementation of a number of next generation technologies

also means the training standards need to be improved. Second class training won't cut it if first class performance is expected and demanded of railroad workers.

We also want to state that we fully support Mr. Wytkind's statements concerning certification of car men, conductors, mechanics and signalmen, as well as with respect to staffing, training and certification for hazardous material movements. FRA is currently conducting a number of studies which we support. We believe several other studies are also warranted. Briefly, these include the safety impact of contract drivers, of railroad crews to and from duty assignments, and evaluation of conflicting and confusing railroad operating rules, follow-up studies of switching operations, fatalities analysis, and a collision analysis working group. And a study of locomotive cab environment and its impact on human performance.

We also believe FRA should reopen its investigation and study regarding the discharge of human waste along tracks where maintenance of way workers perform their tasks, which I address in detail in my written testimony. I simply cannot believe that in the 21st century, railroads use onboard toilets that dump human waste on tracks where our members work.

We also believe reauthorization should address ongoing problems concerning main track switches and dark territory, routes on which no signal system is in place. My written testimony provides more details. In short, we believe that the NTSB recommendations from its report on the Graniteville tragedy should become mandatory requirements.

Once again, I thank the Subcommittee for hearing us today. I am certainly happy to answer any questions you may have. As an echo to the other members testifying today, congratulations to you, Madam Chairwoman and to the Ranking Member. Thank you.

Ms. BROWN. Thank you.

We will hear the last testimony and then we will get into questioning.

Ms. VAN DYCK. Thank you for inviting me to speak today. I am speaking on behalf of the American Association for Justice, formerly ATLA, one of the largest practicing trial bars in the world. My name is Sharon Van Dyck, and I practice law in Minneapolis, Minnesota.

The purpose of my being here today is to make you aware, as the Railroad Subcommittee, of the scope of the problem that was referenced by Mr. Pomeroy and his client. That has to do with the way preemption is being interpreted by the courts in today's environment. Because this Subcommittee and ultimately the Committee and ultimately Congress, has the ability to fix it, to fix it and make it clear that the courts have it wrong, and that they have it wrong because in 1970, when the Safety Act was passed, it was never intended to be done the way it is being done now.

The FRSA is a safety act, and the whole purpose of it is to improve railroad safety for everybody, for railroad workers, for the public, and in particular the public is what is at issue here. The FRA has been empowered to draft safety regulations and has done it, has done a lot of it. The problem is that recent courts are dismissing State law based claims, leaving victims with no remedy based on how the preemption clause and the Act is being inter-

preted. And I believe that that goes to one of the questions, Madam Chairman, that you asked, what is happening, what is causing this.

The Act has a preemption clause because everybody wants the uniform safety provisions that have been promulgated, which are minimum standards that everyone should be following. They want that to be the minimum standard. They don't want people going below that standard. And for years, probably 25 years, courts pretty much interpreted the FRSA preemption clause that way.

What has been happening approximately since about 1993 and increasingly worse, through the Minot case, and I think the reason Minot is such a terrible example—it is an excellent example, but a terrible event—is because it is the ultimate example of what happens when the law is interpreted the way it is being interpreted now, is that it leaves all these people with absolutely no remedy. The FRSA does not provide a remedy.

What is being said is that if there is a regulation or it is an area that is regulated by the safety standards in the railroad industry, that the intent of Congress was in the past and still is to say the mere existence of a regulation for safety is enough, and that any citizen who is injured in a derailment, in a crossing case, in any kind of accident, where those standards have not been even upheld at all cannot be challenged. The mere existence of the safety regulation eliminates all State rights in terms of going to court and getting a remedy.

And that is what happened in the Mehl case in North Dakota. The judge said, my hands are tied. The judge said, Congress, you have to fix this. And as much as I personally and many of us do not believe that that is what the law is or what the preamble actually says or was ever intended to say, that is what courts are interpreting it to do. So we have a Federal statute that provides no remedy. The mere existence of safety standards that courts are saying mean that if there is a standard, you have no remedy. And the latest is that it is being used with complete preemption to pull court cases out of State court into Federal court and then dismiss them.

This was never what the Federal Safety Act was intended to do. It was not used that way for 20 to 25 years. The fix is simple. The fix is to add a sentence to the preemption clause that clarifies that the State law remedies are in place. That is my purpose in being here today and I thank you for your time. I am perfectly willing to answer questions.

Ms. BROWN. Thank you.

At this time, I am pleased that our distinguished Chair of the full Committee has joined us, Mr. Oberstar. Mr. Oberstar, as I said yesterday for those who were not in the room, you started out as a staffer with this Committee 44 years ago. And now his picture will be on the wall as Chair. I am very happy to be one of his chairs, and I can tell you, no one in the entire Country knows more about transportation in every aspect, probably in the world, than our Chairman, Mr. Oberstar.

Mr. OBERSTAR. My goodness, thank you, Madam Chair, for those kind words. I will have to work overtime to live up to them.

Congratulations on your second Subcommittee hearing on the subject of rail issues. Again, I welcome Mr. Shuster to the Sub-

committee and a new assignment for him, the Chair of the Economic Development Subcommittee in the previous Congress, and the former Chair of the Subcommittee, Mr. LaTourette, who devoted a great deal of time and energy to rail issues and whose leadership was much appreciated on both sides of the aisle.

Madam Chair, you have worked diligently to master the issues of railroading and we are proceeding with a very vigorous schedule in all of the subcommittees of the Committee on Transportation and Infrastructure. This is our fourth hearing, and we have already had a markup of several water related bills. We will have more to come in the next few weeks. We have an agenda to report out and bring to the House floor before the President's day recess, at least half a dozen major issues, most of which are bipartisan items that carried over from the last Congress, and others are new issues.

This proceeding on rail safety stems from nearly a dozen years ago when our Committee, in the reorganization that the Republican leadership of Congress undertook to redistribute committee responsibilities, and one of the best moves they made was to consolidate all transportation in the Committee on Transportation and Infrastructure, including rail, Coast Guard and others. When I took a look at rail safety and compared it to safety in the aviation sector, given adjustments for differences in modes, I was, to put it mildly, appalled and set about inquiring into conduct of safety in the railroad sector.

The result of which was a comprehensive bill that I introduced, along with a number of co-sponsors in roughly 1995, 1996, I think it was. There is a great deal, some progress has been made by the Federal Railroad Administration. FRA has implemented some of the recommendations by the National Transportation Safety Board. But FRA still has only 421 inspectors, States have 160.

But only 2 percent of railroad operations are inspected every year. Only 13 percent of the most serious rail grade crossing collisions were inspected from 2000 through 2004. In comparison to FAA, 93 percent of the general aviation accidents were investigated by the FAA. The Federal Railroad Administration has a long way to go to pick up the ball and be vigilant on rail safety.

The RSAC that was established under Jolene Molitoris during her tenure at the Federal Railroad Administration was a splendid effort to bring management and labor together to work out issues.

In the end, voluntary agreements are no substitute for vigorous enforcement of oversight responsibility. And as we have seen in the testimony today, as we have heard over many years, there are serious gaps and shortcomings, failure in rail safety that have to be addressed. Either this Federal Railroad Administration takes appropriate action through regulatory authority that it has or we will move legislation that makes those changes in law.

Thank you, Madam Chair.

Ms. BROWN. Can we go back to the first film with the railroad crossing? Is it possible?

Mr. HAMBERGER. Mr. Miller, the Chairwoman would like to see the film of the grade crossing accident.

Ms. BROWN. While he is doing that, what are the railroads doing to prevent fatigue? We have had a lot of discussion about it.

Mr. HAMBERGER. Madam Chairwoman, we will be talking in great detail about that in two weeks. We are working very diligently to hopefully have some very specific recommendations, consistent with what the Chairman just said, for things that this Committee can do in the area of fatigue.

Having said that, we anticipate working with labor, because what needs to be understood is that many of the issues surrounding fatigue are also part of the negotiated process between management and labor. But several of the railroads have instituted, for example, increased rest times between calls. We have instituted models to try to take a look at how long people should be off, how to guarantee certain days off, improving crew scheduling practices on a work district by work district basis, and working with the crew to make sure that they understand that when there is time off, there is a responsibility at the same time to try to get some rest during that time off.

Ms. BROWN. Did they find the tape? Because I wanted to ask a question about the rail crossing. They took it, OK.

Well, we are going to stand in recess. We have three votes, one 15 minute vote and then I guess two other 5 minute votes. Then we will come back, I guess we should be back in about 30 to 45 minutes. Members will have an opportunity to ask as many questions, we can have a couple of rounds.

Mr. HAMBERGER. We will have that disk by the time you get back.

Ms. BROWN. Yes. So feel free to please, members, come back, because we want to have this question and answer period.

Thank you.

[Recess.]

Ms. BROWN. The Committee will come back to order. I am glad we were able to vote and get back early.

On the film, Mr. Hamberger, I was trying to figure out whether or not it was railroad crossing.

Mr. HAMBERGER. On the first one, there was a crossing gate. I think you can just, as we run the tape and you get a little bit closer, you can see there is a shadow there on the right side. You can't really see it on the left, but of course, if they have it on the one side of the track, it's going to be on the other.

[Video shown.]

Mr. HAMBERGER. Did you see it there on the right? If we can just back it up a touch, Mr. Miller.

[Video replayed.]

Mr. HAMBERGER. The second one did not have active warning lights.

Ms. BROWN. I think you said the second one also did not have a stop sign.

Mr. HAMBERGER. That is correct. That requirement will soon be part of the MUTCD, which stands for the Manual of Uniform Traffic Control Devices. We did support the NTSB recommendation that there be a stop sign at the grade crossings where there are no gates and lights.

Actually, they have left it up to the States to have either a stop sign or a yield sign. It looks like we are going to make another run

at it here. If you look on the right side, right about there, you can see the gate is down on the right hand side.

Ms. BROWN. I see. And he just went around the gate.

Mr. HAMBERGER. And there was a corresponding gate up on the left hand side. And if we could back it up, you will see there is a car in front of him, and he went around the car in front of him and around the gate. You see him going around.

Ms. BROWN. I guess that is what I was asking you, is the technology there that you can, we can make sure that you can't go around?

Mr. HAMBERGER. The technology is there. Obviously it is a matter of resources, and that is why it is so important that this Committee fully funded the Section 130 program for the States to have more money to put into this area, and did not take the advice of the Administration, which is wanting to make that a block grant for safety.

So the leadership of the Congress is very important there. As you know, the industry maintains all of those lights and gates around the Country. It is our responsibility and it is about $200 million to $250 million a year we spend on doing that. But it is a cooperative effort. The one in North Carolina, with Norfolk Southern and the State of North Carolina, to have a corridor that is basically sealed, so that the number of accidents there should drop dramatically there as it gets put in.

Ms. BROWN. OK. I have lots of other questions, but I am going to go to Mr. Shuster.

Mr. SHUSTER. Thank you very much.

I think that all of us can agree on the importance of safety and security. These are serious issues and quite frankly, complicated. As the new Ranking Member on this Committee, I am trying to get my arms around them. So I have been meeting with a number of people throughout the industry and if we haven't, if my staff has not called you, I would encourage you to call our office. Because I really want to sit down and again, try to understand all sides of the issues. I know that there are different views, and that I need to hear them and understand them to be able to make decisions and to be able to have vigorous oversight on this Subcommittee.

The statistics that I have seen, whether they have been industry, whether they have been Government or independent studies, demonstrate to me that rail safety has gotten better over the last couple of years. And as I think Mr. Hamberger said, this may be the safest year in rail history.

So Mr. Wytkind, when I hear your testimony, you made some claims, which again I am certain you feel strongly about. But for me, I need to see the facts. You and I talked earlier during the break. I hope you will come by the office and we can sit down and discuss this more at length. I am sure we are going to be cut short here today.

But I wonder if you might comment on that. Because again, for me, all the charts that I have seen show important strides in a positive way, not perfect. We want to move towards becoming even more safe.

Mr. WYTKIND. I would be happy to come in and talk to you, and I would probably bring with me some of the rail safety experts that

work within some of the railroad unions, who have been living and breathing these issues for their whole careers.

But I won't get into the statistics, because statistics are however you present them. I think the Association of American Railroads is good at presenting the statistics in a way that reflect well on its safety operations.

Mr. SHUSTER. But I would be curious to see your statistics.

Mr. WYTKIND. Well, I don't keep statistics. I just analyze what is happening through a worker's perspective. I would say to you the following: I have been representing transportation workers on Capitol Hill for about 16 years. I have been before this Committee and many others, talking about rail safety and security on several occasions.

When I start talking about the lack of enforcement and the lack of robust fines to, as I said, make sure that the punishment meets the crime, I think that is borne out by stats. When you have as many safety violations as you have around the Country on an annual basis and the average fine is $30, that is the charge of dinner for two at a diner for the average violation, which is hardly a deterrent to unsafe operations.

When I talk about the whistleblower issue, the reason I brought this issue again to the Committee is because there has been a culture of harassment and intimidation in the railroad industry way before, obviously, you began your service in the U.S. Congress. It has been documented on several occasions, including by investigations into the issue by the Federal Railroad Administration, where it did cite that issue as a big concern as they looked into the labor management issues. All we are saying is, if you are going to pass the financial services legislation that you all passed in the previous Congress to deal with a lot of the problems with financial services, whistleblower protections were put in that bill. We would argue that for the same reason that they were put in that bill, you should put strong whistleblower protections to stop harassment and intimidation in any rail safety bill.

So I think there are a number of issues that need to be dealt with. They are really not just about statistics or the way in which statistics are presented. They are about a culture in an industry that we believe is unsafe and that workers and the public are suffering because of that.

Mr. SHUSTER. But again, in a way, I think you can make informed decisions looking at the numbers. You say there are a number of, that is, you know, what is a number? The number to you may be 100 and that may be a lot. But if there are thousands or millions, then that is a very small number. Again, I would like you to come by and let's sit down and let's talk about this.

But for me, I have to see the measurements. If you do not have the measurements, I think you make decisions, just like on Sarbanes-Oxley, we passed it and probably one of the worst votes I have ever made in hindsight, because it has caused so much damage to many of our small businesses that can't comply with the costs. They are so huge.

Mr. WYTKIND. The point I am making is you put whistleblower, and that is not the problem you are referring to. There are a lot

of other problems. I don't think whistleblower protection has been a subject of criticism in that piece of legislation.

Mr. SHUSTER. And I do not want to debate on whistleblower, but I understand there is a whistleblower protection in the law now.

Mr. WYTKIND. It is inadequate.

Mr. SHUSTER. OK. You and I can sit down and we can talk about that.

Mr. WYTKIND. I am happy to.

Mr. SHUSTER. OK. Thank you.

In the regulatory climate that seems to be changing out here in the rail industry, you have cities wanting to reroute or even stop hazmat materials from going through and re-regulate shipping rates, TSAs, looking at new regulations, and just the cost and the complexity that we are talking about, changing on shipping these hazardous materials. My concern is what kind of impact is that going to have on the rail industry, and are we going to stop or at least decrease significantly private capital coming into the rail industry which is, I think, extremely important that we have an understanding of what is going to happen to that private capital coming into the industry.

Mr. Hamberger, Mr. Timmons, anybody else that wants to comment on it, I certainly would appreciate it.

Mr. TIMMONS. The hazmat issue is a serious predicament for the small railroad industry. In the month of January, we had 126 of our railroads move hazardous materials. If you look at the predicament that they face in that context, and the potential implications for communities if we start to curtail the movement of chlorine, for example, it becomes a very, very difficult problem for communities.

On the reverse of that, the railroads are required to carry this material as common carriers. In the small railroad context, they can't charge enough to cover the cost of insurance that would adequately protect them from a derailment resulting in a spill or a breach. So we are confronted with risking the small railroad company and not having any good course of relief.

We have to carry it, we can't buy the insurance to protect ourselves from it, and therefore we risk the company. Now, we have had some small issues with hazmat. I will cite to you one small anecdote that occurred within the last month or so where we had, in a yard, the rear trucks on a chlorine car derail. The car is upright, it is the middle of the morning. Normally the car would be re-righted.

That resulted in an over-reaction, where 75 fire engines, all businesses and 40 square blocks were evacuated. The Holtcher Company came in and re-railed the car at 3:00 o'clock in the morning, while large numbers of apartment dwellers and home dwellers stood in the outside freezing temperatures. The litigation that will go on for that small railroad will be endless, and the railroad owner says he will never again carry another bit of hazardous material. He can't afford to, on the bring of going out of business because of that issue.

And this is just the trucks coming off the track, going at 2 miles an hour, which is a very common predicament in the railroad industry. But the over-reaction, and the Transportation Security Administration taking charge of the site itself, trying to determine

whether this was a terrorist act, had an enormous impact on the community and on the small railroad.

So we think we need some kind of relief in this regard. The common carrier dimension is important, and the movement of hazardous materials by rail is clearly the safest way to move the materials. But to put the companies at risk and the communities suffer as a consequence is unreasonable. Something has to be done. I would strongly urge serious review of this problem.

The railroads, the small railroads anyway, their revenue generation is very, very modest in this regard. So the business of rather give up the material or the product, moving the product than risk my railroad, is a common theme in the small railroad world.

Mr. SHUSTER. Would anybody else care to comment?

Mr. HAMBERGER. If I might, the issue is no less of a concern for the larger railroads. While the larger railroads can of course get more insurance, there is a limit on the amount of insurance they can get. And to put all this in perspective, last year there were about 33 million carloads of traffic moving around the United States. Of those, 100,000, less than 1 percent, about three-tenths of 1 percent, were toxic by inhalation. Anhydrous ammonia and chlorine were about 80,000 and the rest were spread around some other commodities.

So 100,000, three-tenths of 1 percent, it drives about 80 percent of the insurance costs, not only for the short lines but also for the larger Class I railroads; it could be a bet the company situation. Last June, there was a hearing in this Subcommittee where we tried to point out the issues with the common carrier obligation. This stuff right now has to move; chlorine is used to purify much of the Nation's water supply. So it has to get there. We have a common carrier obligation to move it.

But yet we are stuck with a bet the company situation. We are stuck with the cost of the insurance that we can get that is out there. And at least one of the Class I railroads and several others, I think, has said this publicly. Others believe it: that were it not for the common carrier obligation, they would exit the business. With all due respect to my friends in the trucking industry, I have noted that many of them are exiting the business of moving hazardous materials because of the liability issue. They apparently do not have that same requirement.

At that hearing, Congresswoman Eleanor Holmes Norton said that the rail industry is, in her words, in an untenable position, forced to carry it, can't get relief at the top end for liability. So we are working the ASLRRA in trying to come up with some sort of approach, a Price-Anderson kind of approach, the same situation that was faced by the nuclear industry many years ago, to see whether or not there is a way we can continue to move it. We are proud of our record in moving it, with 99.997 percent getting from origin to destination without a release.

But as we have heard and as we have seen, that .003 percent can be very tragic. So we want to work with the Congress, and we do not yet have a proposal put together, but we are working to try to come up with some sort of an approach that would put a cap on liability, so that we can continue to move it. If that does not occur, the industry, at least the AAR, is going to have to take a look and

say, should we try to get out of this common carrier obligation. That is where we are. It is a huge concern, a major concern, because there is a limit on the amount of insurance that you can get.

Mr. SHUSTER. Does anyone else care to comment on that?

Mr. WYTKIND. I might add a comment, if you don't mind, Congressman.

Mr. SHUSTER. Sure.

Mr. WYTKIND. We are not in a position to endorse what has been suggested here today. But I will say that notwithstanding the fact that the Committee may address these common carrier obligations that my colleagues here are addressing, I don't think you can look at this issue as this kind of issue in a vacuum. If we are going to deal with that type of problem, you can't deal with that problem if you are also not going to deal with all the myriad issues that have made this industry, we believe, unsafe, and that I think contributes to not only the perception that the railroads are unsafe but the reality that they are unsafe when they have these horrific accidents.

So I would argue that before you fix that problem, you also need to look at what problems you also need to fix, which is how do you make this industry safer, so that you don't have fatigued workers who contribute to unsafe operations, and so that you don't have these horrific accidents in our rail system. I think that should be the focus of this legislation. For that reason, I don't think we could endorse something like that until we have a comprehensive addressing of these kinds of issues.

Mr. SHUSTER. Do you do it in conjunction?

Mr. WYTKIND. It is not a question of conjunction. I think that you can't look at that issue in a vacuum. It is easy to come to Congress and ask for relief in this particular area, but Mr. Hamberger is not asking for action in a number of other area that we al know need action by the U.S. Congress. I think that that would be a singular fix of his members' problems, but it wouldn't fix the underlying rail safety issues that I believe contribute to the problem.

Mr. SHUSTER. The Chairwoman is giving me the hook.

Ms. BROWN. Yes, listen, you all are moving a lot faster than I am. I do understand that we have a lot of issues, and we want to be fair with everyone as we move forward. There are many, many issues that we have to deal with.

I just want to say, before I go to the next person, that the situation in the industry is not as bleak as it sounds here. Of course, I can bring out Mr. Oberstar to give you the history of the industry, and the history of how we even separated the railroad industry and how we developed these different railroad lines. The last time I went to the railroad conference, that we are not having this year, we brought in the people from Wall Street. I can bring them here and talk about how in the black we are right now.

So we want to be fair, and we are going to move forward. But we want to be fair moving forward together.

Mr. RODZWICZ. Madam Chairwoman, may I add a comment to Mr. Shuster's question?

Ms. BROWN. Yes, sir.

Mr. RODZWICZ. I am not sure there is an answer to that question that would satisfy everyone. In fact, the question may beget actu-

ally more questions. For example, worker reallocation. We don't have people that are qualified on every area of track where these hazardous materials may run. So you would probably eventually have to reallocate crew members.

I am somewhat familiar, as I told you earlier, with your particular district. In many instances, towns grew up around railroads. Our infrastructure, track capacity, is at or near maximum. What you may end up doing is actually centralizing this hazardous material where it becomes even more dangerous. These are different perspectives and questions I ask myself, that people perhaps with TSA or whomever, perhaps this body will have to come up with the solutions. Tracks only run in certain locations right now. So you may not be always able to reroute hazardous material.

So I just think that is a process where I do not know if there is a right answer. Thank you.

Ms. BROWN. Well, we are going to go down that track together. [Laughter.]

Ms. NAPOLITANO. Thank you, Madam Chair, for the hearing. I have a lot of questions formulated, I just won't have the time to ask them all. But I have certain areas that are very key in my urban area that have been a bone of contention for I would say about 20 some odd years. That goes back to my city council days.

Part of it is that the railroad had been less than, the railroad representatives had been less than helpful when the cities were having concerns and wanted to meet with them. That aside, at the current time we were working on the Alameda Corridor East, which is that stretch from Los Angeles into the Inland Empire and on to delivery for the eastern area.

Part of what we found out in some of the briefings that we had with the railroad and with other individuals, including State officials, was the life of the rail and how does the railroad determine when it is time to replace it. My understanding from some of the briefings that we had from railroad officials were that the steel they were using had been not quite up to par, so they quit using it. That was something that was of concern, because of how much of that had been laid and replaced or not replaced.

Well, if that gives, if there is stress, and there is ability for even when it is joined to another rail, whether it is welded or whether it is a joint bar issue or whatever, those are issues that I am very concerned about, whether or not the research has been done, to determine whether or not the rail itself has been adequately upgraded or replaced. And then when we go to the insulated joint bars, it is whether or not the research has been completed. Because there was going to be some research given to a university, and I can't remember off-hand what it was, I would have to look it up, whether or not that has been successful or what has come of it. That is question number two.

Then we go on to the grade separations. Is the railroad, any of the railroads, assisting the communities in being able to support financially the building of those grade separations? And how much are they working with the cities and the States to be able to ameliorate the impact it has on the community, especially in heavily populated areas like ours?

And if there has been an investment, and as we hear that the biggest number of accidents are at the junctions, at the crossings, so whether or not there has been information that would determine whether or not it is a vehicle problem, is it not enough signage, it is updated rail instrumentation to be able to warn people, what is it?

Then we go to the issue of training of railroad personnel. Because at the time when I began getting involved in this issue, there had not been, as I mentioned before, there had been retirement, and this came to us from the railroad officials, of many people after 9/11, and they had not been replaced. So they were putting people on and it would take what, two years, for training? Minimum? Something to that effect. That is what we were informed. These were at hearings with the board of supervisors in L.A. County, along with Congressman Linda Sanchez.

And what that told us is we may be having individuals who are not fully trained manning trains that might not have enough experience to be able to deal with issues that come up that might involve an accident. So those are some of the issues.

And the third one would be the impact that, and thank God we are having one of the local railroads replace some of the wooden ties with cement ties, but they are closing off a mile and a half, which means that now the L.A. County fire department is having to place emergency centers on both sides of those closures to deal with any kind of accidents, whether it is railroad or whether it is automobiles. People are trying to make turns into the previously opened crossings.

And it is not an inexpensive thing for them, and there is no other way of being able to reimburse. Whether or not at the time this is done the railroads are considering working with the communities to be able to address how they can cut down, whether it is the extent, or the length of the changes, or whether it is something that they can work with the cities and try to work out beforehand. Take your choice.

Mr. HAMBERGER. I am going to assume that was for me. Thank you very much, Congresswoman Napolitano. I mentioned right before you came in that one of the things that we are spending a lot of time and energy and resources on is research at a place called the Transportation Technology Center, which is located in Pueblo, Colorado. It is a 54 square mile research facility that the AAR operates under contract to the FRA.

We have been running it now for about 20 years. Last year, under the leadership of then-Chairman LaTourette, Chairman LaTourette and now Chairwoman Brown came out twice to see a demonstration of the technologies that we are trying to develop out there. They include wheel profile monitors that use lasers and optics to capture the images of the wheels as the train goes by, acoustic detector systems that offer predictive safety tools, such that when a car goes by whether or not the bearings need to be changed and get that car out of service before it causes an accident.

Then rail defect detector cars, which I think goes to exactly what you were talking about yesterday, which uses laser technology to try to identify internal flaws in the rail and in the joint bars.

Ms. NAPOLITANO. It is not effective, sir. I am sorry, but we were told it is not effective. There is no way they can look inside that insulation.

Mr. HAMBERGER. As I say, they are working on that. We have a couple of machines that are being tested out there. I understand one of those is now actually in service out on the road. So we are trying to move to address that very specific issue that you raised a concern about.

We are also working on new metallurgical, you mentioned the kind of steel, something called banitic steel, which is a new kind of steel alloy that would last longer and not wear out as soon. The interface between the wheel and the rail is a very important aspect of safety, and in fact, TTCI was hired by the London Underground after they had several accidents, to go over and investigate and give advice as to how to improve safety, because of that interface between the wheel and the rail.

So it is something that we take very seriously. We are spending on technology, and Madam Chairwoman, you have a standing invitation to come back. We do hazmat training out there as well, and we would love to have the Committee come back, for all the new members who have not had a chance to see that technology.

You mentioned grade crossings. I mentioned again in my statement that 94 percent, according to the FRA report to Congress, 94 percent of all the grade crossing accidents are a result of driver error or driver misjudgment. But each of the Class I railroads has a program in place to work with communities to try to close grade crossings and to try to help provide active warning devices at those that are open. It is a fact, of course, that only a closed grade crossing can be totally safe. So where there are grade crossings, then you want to have the active warning devices, and as I was discussing with the Chairwoman, there are technologies out there that can actually cut down on accidents, like median barriers, for example, that pop up when a train goes by.

Ms. NAPOLITANO. I am sorry, sir, but that does not stop pedestrians from trying to beat the train. We have had several accidents where children go across because there are no grade separations.

Mr. HAMBERGER. You are correct, it is the number one issue in safety, in our opinion, and that is to try to get people to understand through Operation Lifesaver that it takes a mile for a train to stop, and just try to educate them.

Ms. NAPOLITANO. Operation Lifesaver, sir, they started trying to implement it in some of the grammar schools and middle schools close to where the accidents had happened. And they were volunteers, they never went back. So what good is it?

Mr. HAMBERGER. It is a volunteer program. The AAR sponsors it. Individual railroads sponsor it. Congress and the FRA give them some resources. The program is there to try to get the word out. It is an educational effort.

Your next issue was training. Mr. Wytkind and I disagree on the level of training that employees receive. I know that the Chairwoman did have the opportunity to make a trip to about a $50 million new facility in Atlanta that one of our members has for training. I will again invite the Committee to come down there and see the kind of training that does occur with respect to engineers. The

training program has to be developed and submitted to the FRA for review. We believe that again, the proof is in the numbers. This is the safest year on record.

With respect to security training, the security training program we developed last year with the support and actually the leadership of Rutgers University, the National Transportation Institute at Rutgers. That program was submitted to the Department of Transportation and the Department of Homeland Security.

And the rulemaking Mr. Shuster is referring to that the Department of Transportation put out in December, the Department opined in its rulemaking that the AAR-sponsored training program met their security training requirements. We do have a situation in place where every member of every Class I will receive that training. So we think that we have addressed the training issue.

I will now yield to my friend, Mr. Wytkind.

Ms. NAPOLITANO. Is this offered to all railroad employees?

Mr. HAMBERGER. That is correct.

Ms. NAPOLITANO. What is the number of hours they must put into training?

Mr. HAMBERGER. The number of hours in training depends on the craft which the person is involved in. I will get you some information on the record about that.

Ms. NAPOLITANO. I would appreciate it, sir.

Mr. WYTKIND. Yes, if I could, thank you for the question. I can't address all the issues, obviously, you are dealing with in your district. But on the issue of training, it is absolutely absurd for the railroad industry to claim that its workers are being trained to the level that they should be. To have the Department of Homeland Security claim that it meets their security requirements, there is a little problem with that: they don't have any. So to say that it meets a requirement, there are no security training requirements. We have been trying to get that enacted into law——

Mr. HAMBERGER. Department of Transportation.

Mr. WYTKIND.—for quite some time and have failed to do so, although I have a lot of confidence that in this Congress, the mandate is finally going to exist. Until the mandate exists, the workers are not going to be trained.

I would like to know who the workers are that Mr. Hamberger is referring to. I on my own have periodic briefings with rank and file representatives from around the Country, both on the passenger rail and on the freight rail side. Every single call I have had with these groups of workers, the universal message is that training is grossly inadequate, it is typically a ridiculous, low-budget video, and they have no idea what to do in this post–9/11 world that we are living in. They do not have the knowledge and the training and the expertise, hands-on expertise that you need to know to be able to respond to and deal with security breaches and, God forbid, actual attacks on our rail system.

So I am sure the curriculum is real nice. The NTI does some good work. I have seen some of it. But unless it touches the workers at the rank and file level and they get real, classroom style training on the job, not to take home to do some interactive CD-ROM, they will then not be trained.

Ms. NAPOLITANO. Thank you, Madam Chair.

Ms. BROWN. You are welcome. Let me just say, this hearing is a different kind of safety. And we will have a hearing on homeland security and what we are doing in the industry post–9/11. So we had to separate it a little bit.

I did go for the training, and one of the things, as we worked through the issues, for example, the train has to have so much time to stop. We have to educate the public about going around the safety bars, because clearly, the train cannot—I crashed the truck in my training. I failed.

So we have to make sure that—this is going to be a homework assignment for all of the members. I am going to make sure that they all go through the simulators and they experience it. Because clearly, they need to know that you cannot, if you are in a little car, and you go up against a train, you are going to lose. I am just very happy that the former Chair of the Committee has joined the Committee and is going to be here to provide the expertise and the knowledge to help us work through this reauthorization. Mr. LaTourette.

Mr. LATOURETTE. Thank you very much, Chairwoman Brown.

Before I begin, now that the new majority has stopped these pernicious private travel trips that have obviously corrupted us——

[Laughter.]

Mr. LATOURETTE.—I would hope that the gentlelady would consider a Congressionally sponsored trip out to TCC. I found it to be illuminating, and I think the new members of the Subcommittee would as well. From my observation, they are doing pretty good work.

Ms. BROWN. I have already approached them, and I am going to write a letter to the Committee and ask for a waiver. Because it was one trip I took every year, because it was educational and informative. It was an opportunity to talk to the Senators and talk to the people in the industry. And one of the things that I think is very important is to educate people on issues that we are going to be dealing with as we move forward. It was very educational in the industry. I want my constituents to know it. It is what we are supposed to be doing.

Mr. LATOURETTE. I couldn't agree with the Chairwoman more, and I hope that you are successful. If you need any help on our side, I am happy to supply it.

I want to thank you all for coming. Mr. Hamberger, I was not in the room for your testimony, but I read it. I was in the room for most everybody else's.

Just referring back to yesterday first, Mr. Hamberger, I listened to the new Inspector General. I would hope that your membership would take to heart his observations about not reporting. I think we had a little dust-up about what reporting was, and is it a telephone call, is it in the mail. But if the rule is that serious collisions at at-grade crossings need to be reported, they should be reported. I know you agree with me, and I would hope you are going to do whatever it takes to make sure that your membership complies, one.

And two, my view is if they don't, they should pay a fine. If it is a rule, you should follow it. I assume you don't disagree with me.

Mr. HAMBERGER. I learned when you were Chairman it was not a good idea to disagree with you.

[Laughter.]

Mr. HAMBERGER. But if I could just illuminate one second, and I would be remiss if I did not say for the record that we appreciate the leadership you did provide when you were Chair of the Committee in the last Congress.

What came out under questioning of Mr. Scovel was that in 2006, of close to 3,000 accidents, 12 were mis-reported. And in his own report that he issued in an audit in 2005, his predecessor found that the reason for the mis-reporting in that time period was because of a change in the criteria for the call into the NRC versus the written report to the FRA. We take it very seriously and you are of course correct, when there is a violation, there should be a penalty. But I would say that 12 mis-reportings out of almost 3,000 is hardly a crisis.

Mr. LATOURETTE. And I was glad to talk to the Inspector General about that. The second part of my remark is not a question to you, but his facts and figures differed from the ones you have testified to today. I heard what Mr. Wytkind said to Mr. Shuster about statistics, but there is a reason we do keep them. So I do not think that either party is entitled to their own set of statistics. We should know how many accidents there were and how many were reported, how many were not reported. My position continues to be, I do not think 12 is a big number, but they should be reported. If they are not reported and that is the rule, you should follow the rule, and if you do not follow the rule, you should be fined.

Ms. Van Dyck, I want to get to you for just a second, because Federal preemption is a huge issue that we discussed not only in this Committee, but on every other Committee that I serve on. A great deal of tension between State legislatures, city councils and the United States Congress. I happen to think that there are some areas where the Federal Government needs to act and preempt the field. I think transportation in many regards is one of them.

Just so I am clear, you are not arguing against preemption, you are arguing against the way it is being applied currently in the courts?

Ms. VAN DYCK. Preemption, you understand my basic premise, I believe.

Mr. LATOURETTE. Sure.

Ms. VAN DYCK. I do not disagree with you that there are some areas that require uniform handling, and transportation is undoubtedly one of them. I don't disagree with you at all. What I am talking about is, the way this Act was written addresses that precisely, in the preemption section itself. Federal law, where there are standards that have been promulgated, and the FRA has promulgated many, many of them, those are the standards that should be followed. And States cannot have contrary standards. They can't have standards in conflict with those. And I have no problem with that.

Mr. LATOURETTE. Good.

Ms. VAN DYCK. My problem is, when courts are interpreting preemption to mean that if a standard exists, or the existence of a

standard eliminates a common law right of action, if what you are saying is the standard was not met, that is not OK.

Mr. LATOURETTE. Right. I do not disagree with you, I just wanted to be clear on your position. Because some of the tension we have is that some of the States want to go in and have 50 different standards. That is a difficult thing for a railroad, it is a difficult thing for a bank. So as long as there is a regulation that is fair and people are not cheated out of their remedy, whatever that remedy is, I think that we are OK.

Just as an aside, I thought one of the most brilliant things that I ever saw was when the American Trial Lawyers Association changed their name to the American Association of Justice.

[Laughter.]

Mr. LATOURETTE. If you look at public opinion polls, the only people that score lower than attorneys and trial lawyers are members of Congress.

[Laughter.]

Mr. LATOURETTE. So after the last election, I am going to suggest to the Republican Party that we change our name to be like the Party for Truth or something. I really thought that was a great move.

[Laughter.]

Mr. LATOURETTE. Madam Chairwoman, we are going to have another round? I want to talk about fatigue.

Ms. BROWN. Go ahead.

Mr. LATOURETTE. We talked about grade crossings earlier, and Mr. Rodzwicz, I agree with you, most railroads were there before the towns were there. And a lot of the difficulties we have, if you have ever been in the cab of a train with your membership, it is like driving down a tunnel. The trees are on all sides, I think it is a very, very scary thing. I don't have any sympathy for the nuts who decide to beat the train, I don't have any sympathy for trespassers.

But I do think that the reason most of us support the Section 130 program is that a lot of these intersections are poorly designed. You can't get the cities—because they don't have the cash to do it, the railroads really are not in a position to build a grade separation at every at-grade crossing in this Country. So I would like to see us, in the next highway bill, make the Section 130 program more robust than it is.

But on the issue of fatigue, I would hope that both you and Mr. Wytkind, I think that we need to have a discussion about limbo time. I think that is a valid observation. I think we have to have a discussion about crew size and staffing.

But one of the things that I have noticed in your contracts, and maybe you can comment on it, you used to have provisions in your collective bargaining agreements dealing with mileage. What I hear when you talk about fatigue, when you talk about people working too long, when you talk about limbo time, is that you have some of the tension that the airline pilots have. And the airline pilots, there was just a big news story the other day that the guys who are turning 60 want to keep flying until they are 65. The young guys that are first officers want the old guys to retire so that they can become captains and fly the planes.

What I hear from time to time is that you have some more senior engineers that are mileage hogs, that love driving the train from the east coast to the west coast, because it pays better and they get more time, things of that nature. So if we, in exploring safety and the issue of fatigue, and we did have a hearing last year on circadian rhythms and stuff that I don't even understand, but if we look at limbo time, if we look at hours of service, if we look at staffing levels, don't you think that some of these things are better negotiated in collective bargaining agreements? And why, if I am right, has the mileage thing been taken off the table in your collective bargaining agreements?

Mr. RODZWICZ. First of all, I hope no one is hoping that I retire. It is not going to happen.

[Laughter.]

Mr. LATOURETTE. Listen, when I get into the plane, I like the pilot to have a little snow on the roof, because I feel better.

[Laughter.]

Mr. RODZWICZ. I want to answer your question, but I would take the snow on the roof right now versus what I have.

[Laughter.]

Mr. RODZWICZ. There are collective bargaining agreements in place that discuss time off. And they have been there for a long time. Unfortunately, for one reason or another, they don't occur. But we have other ideas that we are ready to present. We would like to see, for example, train scheduling. That would tell the operating crews pretty much when they are going to work and allow them to get proper rest. We would like to see the Hirsch model, that has been validated by FRA, we would like to explore that possibility.

The best one that we have presented to several agencies is called employee empowerment. What that means is, who knows better than me if I am fatigued and I can't go to work? Unfortunately, because of understaffing, when one of our members or members in other unions in the operating crafts calls up and say, I would like to mark off, you can't, because we need you. Well, I am fatigued. Are you refusing to perform service?

But we are willing to explore different alternatives to discuss finding, hopefully, some type of solution to fatigue. Because it is preeminent in our industry.

Mr. LATOURETTE. And I am, too. I tell you that the question that deals with mileage, I would hope as we explore that, which I know the Chairwoman will, that the issue of mileage be resubmitted.

The other thing that I would ask you to think about, I visited the CSX yard in Cleveland, Ohio, just outside my district. And the crafts that work in the yard complain that the hours of service regulations, which are important on some of the operating crafts that we are talking about, really hamper them to have the ability, if they want to, and again, you go to employee empowerment, that if they want to come in and work additional hours, if they want to work overtime and things like that, that some of our hours of service stuff gets in the way. I would hope that we would look at perhaps the difference between those men and women that are out driving the trains and repairing the trains and traveling great distances to repair the trains and compare those to the guys who get

up just like everybody else in Cleveland with their lunch box, go to work and come back home.

So I think if everybody is willing to put everything on the table, maybe we can get this thing done.

Mr. Wytkind, did you want to say something?

Mr. WYTKIND. Yes, just one, thank you, Mr. LaTourette. Thank you for your engagement on this and all the other issues that we work on.

I think that having a reasonable discussion about all the issues is the way this debate ought to occur anyway. And having a discussion about what the real rank and file worker needs and what he or she is experiencing in the practical world of working in the industry I think is obviously a relevant issue to the discussion.

But one of the examples I gave in my testimony was the fact, and I spoke a little bit to Mr. Hamberger about this during the votes, I think there are some issues here that we might be able to find some common ground on. There is no one, I can't believe that the executives that sits on his board of directors think that there should ever be many scenarios where workers are working 18 to 20 hours out of 24 hours. If that worker said, well, I need the overtime, at some point, that is just too bad. You need to have standards in place that deal with the real safety consequences of having overworked employees.

And so I think the gaming of the system, the way in which they schedule the employees, both in the operating and non-operating crafts, the way in which the statute has been interpreted to mean, I talked to the signalman's union, which told me about, they call it this creeping effect of changing the interpretation of what the law says, it went from 12 hours to 16 hours. There is just chronic fatigue in the industry, and coupled with all the staffing shortages that clearly exist, because the AAR's own numbers show they need 80,000 employees in the next five years. The NTSB's numbers are actually higher. I think you have a pretty chronic issue and problem that needs to be addressed by Congress, or it is not going to be fixed.

Mr. LATOURETTE. I couldn't agree with you more. Nobody wins with an exhausted work force. It creates a situation with the railroads where your membership gets pissed off, they are exposed to liability and Ms. Van Dyck has more business. That is the only thing that works out there.

So I do think that there is a will to work this out. If there is any way I can be helpful, I look forward to it.

Mr. WYTKIND. Thank you.

Ms. BROWN. Thank you very much.

As we move forward, this is a very interesting issue, because I have heard both sides. Yes, the men and women that work in the industry want to know that they have a certain schedule. But then when they have the certain schedule, when they can't get overtime, then they are concerned about their income.

So as we work through it, we need to bring in some of those rank and files to get their input as we move forward. But I have one question, then I will go to the next person.

Mr. Rodzwicz, you mentioned something about sanitation two or three times. Can you tell us a little bit more about that? Because

you know, we have had some of the same problems with the cruise industry and they had to address it. Can you expand on that just a little bit more?

Mr. RODZWICZ. I can. It is really a maintenance of way situation. Certainly they are going to work with human waste sitting in between the six foot of the tracks. I can tell you as a locomotive engineer that on I do not know how many different occasions I have gotten on an engine and I was actually afraid to use the facility, because of its filth. We have still some railroads, and it is probably an isolated situation, where we have engineers using bags to do their business, and then throwing the bag out the window.

So the railroad tried to cure that, this particular railroad, by making you sign your name to the bag. And of course, our operating crews are pretty innovative. They started to sign other people's names to the bag and they still threw them out the windows.

[Laughter.]

Mr. RODZWICZ. But what I would like to do, Madam Chairwoman, is have a representative from BMWED respond to your question in writing, if I may, please.

Ms. BROWN. That would be good.

Mr. HAMBERGER. If I might jump in, Madam Chairwoman, one of the things I have discovered in this job over the last close to nine years is that many an issue sticks around, and even when it has been resolved, we go back and talk about things the way they were a few years ago, as my colleague just did.

That issue was resolved five years ago by a rulemaking at the Federal Railroad Administration. The practice the gentleman talked about does not occur. It is prohibited. And if he has examples of where that is occurring, I will go with him to the FRA to report it. Thank you.

Ms. BROWN. So you will be giving us something in writing also?

Mr. HAMBERGER. Yes.

Ms. BROWN. One other question for you, sir. You cannot investigate an accident if it is not reported within 30 to 560 days. The law says you must reopen the National Response Center within two hours. Is that accurate?

Mr. HAMBERGER. That is correct, depending on the severity of the accident. And as we heard yesterday, in an audit of the 2006 grade crossing accidents, Mr. Scovel testified that of those close to 3,000 accidents, only 12 were not reported properly.

Ms. BROWN. OK. Mr. Braley?

Mr. BRALEY. Thank you, Mr. Chairwoman, and thank you, all the members of the panel, for spending time with us today. I represent the State of Iowa, which grew up with railways. The first railway bridge across the Mississippi River was built in my district in Davenport, Iowa, in the 1850's. A member of Congress who represented the State of Iowa, Dr. Grenville Dodge, was the chief engineer for the Union Pacific Railway, and served in Congress, and by all accounts spent most of his time here lobbying on behalf of the railway. So we understand the significance of rail transportation to the people of our State.

But I am also very concerned about some of the statements that were made today, particularly because of the focus of this hearing, Madam Chairwoman, which is the Federal Rail Safety Program.

And whenever there is a concern about how the economic impact of transporting particular cargo affects the issue of rail safety and someone suggests that the quick fix to that is caps on liability, the question that I have for two of our panelists, Mr. Hamberger and General Timmons, is can you explain to me how capping liability to people who are injured by ultra-hazardous chemicals transported by your railways promotes safety?

Mr. HAMBERGER. Yes, I can, because it starts with the fact that we have an obligation, a common carrier obligation to move it. Now, the reason there is a Federal mandate, I presume, is because there was a judgment made that moving it by rail was safer than not moving it at all or safer than moving it by truck.

So if that is the conclusion, then you want to continue to move it by rail. But what we have heard from General Timmons and what I am asserting is that the liability threat of these toxic by inhalation hazardous materials that we move, is such that it could put his members out of business, could put my members out of business. So if we want to continue to move it by rail, because that is good public policy, then it seems to me there needs to be something at the high end that says, this is not a bet the company kind of situation.

The other alternative which I would posit is get rid of that Federal mandate that says we have to move it and then see what happens. Will it move? I don't know. And since a lot of it that moves is chlorine, about 35,000 car loads, which is used to purify the Nation's water supply in many cities, having it move is an important thing.

So that I think is the conundrum or the policy judgment. As I said, Congresswoman Holmes Norton said it was a patently untenable position. I hope that helps.

Mr. TIMMONS. Let me just add to that. As I reviewed the TIH movements for January that I alluded to a little earlier, somewhere in the vicinity of 85 of those movements were less than five cars a month. Very, very small railroads. Those are clearly chlorine cars servicing water treatment facilities in the smallest communities across the Country.

If that individual has an accident and goes out of business, that community is in serious difficulty. Because we don't move chlorine by tank truck. It is moved by rail car.

Mr. BRALEY. Can you cite for the Committee one example of any member that went out of business because of the risk you are talking about?

Mr. TIMMONS. No, I cannot. However——

Mr. BRALEY. Mr. Hamberger, can you?

Mr. HAMBERGER. No, sir.

Mr. TIMMONS. But I can tell you that the insurance predicament that the railroad industry faced over the last five years is such that we can no longer afford that insurance. And if we do have an accident, the litigation costs, damage costs, et cetera, are so exorbitant now, and they have not been heretofore, that those railroads will go out of business. There is just no question about it. You are making the small railroad carry it. He has no way to pay for the insurance to possibly cover it. So if there is an incident, he is out of business.

Mr. BRALEY. So why do you put the burden of that risk on the injured bystander, as opposed to the people who are benefiting economically from using your status as a common carrier to require the transportation of that material?

Mr. TIMMONS. What I would say is that this a collective problem that users, producers, transporters, insurers and potentially the Federal Government tries to deal with. I have no problem with those that are injured receiving just compensation, if it is the result of negligence by the small railroad. My problem is that you have told me to carry it, I can't foot the bill, and out of business we go. Communities and shippers alike across the Country will feel the impact. All I am looking for is some equation, some formula that helps us put together a solution to this problem.

Mr. BRALEY. And spreads the risk in a way that is not so burdensome to your members, is that correct?

Mr. TIMMONS. Absolutely.

Mr. BRALEY. Madam Chairwoman, I just have a follow-up question for Ms. Van Dyck. One of the things you were talking about is the impact of these Federal preemptions, when they are applied in such a manner that completely deprives someone who is injured of a remedy, any remedy.

And in your written statement, you talked about a point that I think is rarely mentioned on hearings on safety. You wrote, when no remedy is available to persons who have suffered severe injuries due to the negligence of another, those persons rely on taxpayer funded programs, such as Medicaid and Social Security disability payments. That burden then gets passed to on the American taxpayers when there is no private remedy available.

Could you comment on the implications that that brings for your clients and the people you represent in seeking to have some means of putting their life back in order after being subject to this type of an injury?

Ms. VAN DYCK. Yes, I can. The whole purpose of Sate law remedies and State law courts is simply to make people whole, not to give them a windfall. And the course have been doing that forever. What happens when you have a derailment such as Minot, or crossing cases, I have one where the signals did not work and a family of five were catastrophically injured, with brain injured children who are going to need 24 hour attendant care the rest of their lives, when those kinds of things happen because of negligence, and that is what I am talking about, where a standard has not been met, where safety has not been maintained, how do those people pay for that?

Well, if you can't go to the source of the negligence, if you can't hold that entity or person accountable, and our society always has done that with just about everybody, every industry, we hold them accountable for the damage they have caused. The life care plan for one little boy I represent, it is going to cost him between $8 million and $10 million by the railroad lawyers' calculations just to take care of him. His family can't pay for it.

The insurance company, he had insurance through his father, but his father had to quit his job to take care of the boy. So now the family is on Government benefits. Well, Government is going

to be paying that $8 million to $10 million. It is not that nobody is going to pay it.

When the injured worker is the one that is hurt and has those kinds of bills, it is the employer's insurance whose premium is going up that is going to end up paying for that. Ultimately, you probably have a worker who isn't going to be able to stay in the job.

So in the end, without the ability to place the burden where it belongs and have compensation for the injury cased only if there is liability, only if there is negligence, not over the board and across the board, if you don't have that, someone else is going to pay for it. And the someone else is going to be the family, the community, the employer and the taxpayers of this Country. That is why our law recognizes the State causes of action.

Mr. BRALEY. Thank you.

Ms. BROWN. Mr. Walz.

Mr. WALZ. Thank you, Madam Chair, and thank you to all of you. I know it has been a long day and I appreciate your patience in staying with us. This is truly an important issue and it is one of the prime responsibilities I have as a Congressional representative, is safety, and in terms of railroad safety is why we are here today.

I represent Minnesota district that is prepared and on the verge, and ironically enough, I am sorry I stepped out of this, but a call from Secretary of Transportation Peters concerning the largest railroad expansion in 100 years is going to go through my district. Large project upgrade, track expansion, things like that. No one is denying, again, in this hearing, the need for rail travel, the need for improving the ability to do that.

My question again focuses on the safety of this. This railroad itself will run through the major city in my district, which is Rochester, Minnesota. It will run within a few hundred feet, feet, of the Mayo Clinic. This institution and the people in Rochester and others have expressed concern about safety.

Now, what I have heard, and General Timmons, I looked and in reading your report and listening to you, the answer I get a lot of times is that safety is predicated on age of equipment, or in this case track, and that if you improve track, you are going to improve safety. I did also hear that we are showing an improvement for 2006, I would caution you that we are not done yet with 2006. I had a 30,000 gallon spill a few miles from my house in November that is not showing up yet. So that is yet to be seen, and we need to work that out.

My question on this is, though, and I don't come from the railroad experience on this, I come from a couple of decades of working with heavy artillery. The question there, or I guess always our focus, our institutionalized focus, is on safety and accountability, of being able to show and certify how we are safe.

My question that keeps coming up on the railroad, whenever I ask, is the increased incidents or the chance of a problem near the Mayo Clinic or anywhere along this line will decreased and be nonexistent if we simply put the track in. I don't think I am a believer in that, per se, in that I believe safety comes from an institutionalized safety program with redundant features in there to make sure

it doesn't happen. I worked on equipment that being in the National Guard was many generations outdated, yet our safety record was very good, because I can tell you it was accepted. There was no need for whistleblower protection in that everyone was trained and expected to stop any unsafe act at any time, no matter what.

My question when it comes to the railroads is, I am wondering, when I am hearing representatives from the people working on the railroad and they are telling me they do not have enough training and they are not comfortable with that, that makes me concerned that the institutionalized safety program is not there, that the ability to certify, to pre-operational checklist and all the things are not there. And I am concerned and think that the rail safety program should include those. I know that you are basing it more on performance based. I don't think you ever get to performance based unless you do those previous steps. So maybe I will just address that to both of you gentlemen.

Mr. TIMMONS. Good observations. And let me start by talking about this business of rail replacement. Permit me just a moment or two of history here. The small railroad industry, as we know it today, over the last 25 years, is as a consequence of the Staggers Act where we were fortunate enough to acquire large portions, about 44,000 miles worth of railroad, over the last 25 years, that had not seen significant upgrades and maintenance, simply because it was economically unfeasible from the large railroad perspective. So our priority in that time is to ensure that the rail weight, gauge, tie, ballast, switches and all of the other infrastructure that we put this equipment on are suitable for the loads that they are required to carry.

As we approached that problem, a $7 billion to $11 billion challenge, by the way, as we have approached that problem, the industry shifted from a 263,000 pound axle weight car to a 286,000 pound axle weight car, which forced us to re-look at how we were going to address this problem. So from the small railroad perspective, it is extremely important to get the infrastructure up to the right standard. We can't interchange 286,000 pound cars with the Class I railroads unless we have infrastructure and equipment that is suitable for the job.

Now, having said that, the fact that we have rail in the ground today that is 90 pound rail, standard Class I railroad track today is probably anywhere from 128, 130, 142, somewhere in that range, we have railroads that are running with 90 pound rail, 110 pound rail. But the speeds on which we operate over that rail are slow enough that it is not so much of a problem if the right of way, the ties, tie plates, et cetera, are all in good shape.

So from my perspective, in order to make sure that we can carry the loads, that the market force has driven us to a larger car, we have to make sure that the right of way is right. So that will help reduce derailments and other related problems as far as the track goes.

Now, as you are probably aware, track is inspected every two weeks. So track inspectors are assigned to look at the railroad, physically look at the railroad. The small railroads also operate geometry cars.

Now, contrary to the Congresswoman's observation, the geometry cars and some of the more sophisticated equipment, gives a very, very high probability of a solid rail bed and infrastructure set. So by the time you have run geometry cars over it and some of the analytical equipment that looks at the metallurgy pieces, you have a reasonably reliable rail. The small railroad is moving in that direction.

We use Class I geometry equipment. Some of the States have their own geometry equipment. So we have spent a lot of time working that particular problem.

As far as the training goes, I have to say that we are in arrears in the small railroad industry. We need a lot of work in that regard. We have to offset that, however. We have some very experienced railroaders who trickle down from the Class Is that bring an awful lot of experience. We also are contracted with the National Academy of Railway Sciences, Overland Park, Kansas, which has a national training school there, and through their internet system and through arrangements that we have made with them, we are focusing hard on the professionalism and competence of the small railroad folks.

Plus we do our own internal inspections. My safety and operations inspector today is on a railroad analyzing that work and will give them a full report on their shortcomings and how they need to do this. This guy goes around on a continuous basis. We have contractors that do that also.

I don't mean to belabor the point, and there is certainly a lot of room for us to improve. But the areas, the physical, the mechanical pieces, are important for us. The training piece is extremely important for us. That gets to the economics. If we can't interchange the cars with the Class Is because our infrastructure is weak, then we are going to go out of business. It is a compelling requirement.

I know many of you have heard this story before, but I am compelled to tell you again. The two enormously important funding streams that have come from the Federal Government for the small railroad industry are the Railroad Rehabilitation and Infrastructure and Finance Program, which I am not sure we want to get into that right now. But that is a troubled program. And despite the good work that the FRA has done, the Office of Management and Budget has made that enormously difficult for us to capitalize on that program.

Nonetheless, in nine years, we have gotten over $500 million for that program to pump into our system. The other was the enormously important tax credit that most of you in this body sponsored. It exhausts this year. It worked out to be about $501 million. We need to extend that for another three years. And that money is designed specifically to work infrastructure and maintenance problems which directly relates to the safety dimension of the small railroad industry.

Thank you very much for your forbearance for that long discussion. But I think it is important for you to appreciate where we are coming from in the small railroad world.

Ms. BROWN. Thank you.

I have three questions, and I will give each one of you an opportunity to answer those questions. You can just kind of jot them

down, so if, in any of your closing remarks you want to respond to the question.

As we plan for reauthorization, what areas are most needed for revision or reform, one; what are the most important areas for this Subcommittee to focus on regarding FRA's safety activities; and the last one, if there was only two things that you would like to see FRA accomplish, what are those things? I think, Mr. Timmons, you just summed up one of them. But that gives you a moment to think about it. As they think about it, Mr. Shuster, do you have any other things you want to add to that list of three things? Do have something?

Mr. SHUSTER. No, I think I have all my questions in. I appreciate everybody showing up today and I look forward to meeting further with those of you that I already have, so we can continue to discuss some of these issues. Thank you.

Ms. BROWN. Mr. Walz? Do you want to add anything to that list?

Mr. WALZ. No, thank you, Madam Chairwoman.

Ms. BROWN. All right, then, the old teacher in me is coming out.

Mr. WYTKIND. I am happy to answer your question. I don't think I just have two things, but I guess if I answer question one, then I don't have to answer question three.

The issues that we are going to focus on are one, accountability and enforcement, to make sure that our Government does what it needs to do to enforce the law and make the requirements stick, including robust fines when they are needed.

The second thing is we are going to fight for stopping this harassment and intimidation through stronger whistleblower protections. Safety and security training is going to be a huge mandate, because despite the comments we heard today, too many of the rank and file workers are not receiving the training they need.

Four, we are going to try to find a cooperative way to work on this fatigue issue, reflecting a little bit on Mr. LaTourette's comments. And lastly, I think we do need to deal with the technology issues that we can address through this legislation that begins to fix the problems we have with items like dark territory, where you have off the shelf technology that could eliminate a number of hazards, that if you implemented, would hopefully begin to alleviate a number of the safety hazards in the rail industry.

Ms. BROWN. Thank you.

Mr. WYTKIND. Thank you.

Ms. BROWN. Mr. Rodzwicz.

Mr. RODZWICZ. While I certainly concur with all of Mr. Wytkind's statements, there are three areas that I think cover all three questions, really. That would be training, staffing and fatigue.

Thank you.

Ms. BROWN. Just one second. That did not cover your other area that you mentioned earlier, about sanitation.

Mr. RODZWICZ. Madam Chairwoman, I promised you that we would give you a written response, and I am a man of my word.

Ms. BROWN. Ms. Van Dyck.

Ms. VAN DYCK. Thank you, Madam Chair.

The thing I would like to see with respect to focusing on the FRSA in particular, because that is where the problem lies, on the issues that I spoke about today, it is a simple fix. And the fix is

basically an amendment to the preemption language that does not get rid of preemption where it is appropriate. What it does do is basically say what was intended all along, because it focuses on safety, it encourages safety. Nothing in this Act is intended to preempt State law remedies, or something along those lines. That is all it would take.

Because if people can't bring a cause of action and challenge, whether all these safety regs that are intended for safety are met, then there is no incentive to continue to meet the standards, because it is that incentive that is needed here, and I think it is basically a one line fix.

Ms. BROWN. Thank you.

Mr. Timmons?

Mr. TIMMONS. Madam Chair, I think there are a couple of things that we have to focus on. I have touched on them lightly before, but I am going to say again as a reminder, this business of doubling the penalties for small railroads is something that has been proposed by the FRA, is under consideration now.

Ms. BROWN. Would you repeat that again?

Mr. TIMMONS. Yes, ma'am. The doubling of penalties for violations that occur on the railroads. As you know, the inspectors find these violations and there is a standard set of violations. This past December, the FRA published a very exhaustive recommended schedule of penalties for TIH equipment, which are pretty significant, 343 different categories of penalties for small railroads and large railroads that have very substantial costs.

The doubling of those and doubling of the current penalties we think is unreasonable for the small guy. So I think that needs clear attention.

This liability issue for hazardous materials is something that the Congress just must address. Collaboratively, Ed Hamberger and I are trying to work with our constituencies to figure out how we can best do that. But this is a challenging problem. There are a number of very, very difficult and vexatious dimensions to this thing that are going to require some help at this level. So I would say that we need some assistance there.

I would also tell you that while these areas need attention, the RSAC, the Rail Safety Advisor Committee, is very effectively looking at a host of issues that need attention. And I am convinced that they will be successful in that regard. But many of them are technical matters, but all of them have an impact on small railroads, as well as large. I can provide that information to you in detail if you would like, with greater explanation.

Ms. BROWN. Yes, sir, and General, I think you and I need to have some extensive follow-up talks.

Mr. TIMMONS. Yes, ma'am. I will be happy to do that.

Ms. BROWN. I think we have met before, when we were discussing bonding and other things. It could be bipartisan, it could be with the committees, but I think we need to talk about the short lines in particular and how we can assist them.

Mr. TIMMONS. I would welcome the opportunity to do that, ma'am, and I will work with your staff to get on your calendar.

Ms. BROWN. Yes, sir.

Mr. HAMBERGER. I would like to associate myself with the remarks of the General and just add one or two things to your point, Congressman Walz. I believe that we in fact have a systems approach. Fortunately, I am a Washington lawyer, but I take a look at the end result.

But let me get to you examples of the kinds of redundant procedures that are there, the kind of focus on safety. And I have been out on the railroad as well, and I have been to safety briefings, I have been to safety fairs where the culture is instilled that safety is our number one priority. And if there is a failure on the part of my association with this Committee, it is not getting across the point that there is not a culture of harassment and intimidation, there is a culture of safety. That is what we are going to try and get across. We know we have to work with the Committee and with our friends in labor on the fatigue issue, a huge challenge ahead trying to unwind all of that with respect to the negotiated contracts. But we know we have to take a look at that, and look forward to the hearing on the 13th to get into that.

And then of course, as we take a look at the whole issue of hazmat, the issue of a Federal preemption, I hope. I associate myself with Mr. Wytkind's remark. It must be looked at in the context of everything. I agree that we have to take a look at all of those issues from tank car safety to a cap on liability to Federal preemption. So I hope we can take a look at that as a group.

And again, I would just close with an emphasis that in the railroad industry, both short line and the Class Is and our employees are focused on safety. That is part of our culture. Thank you for staying with us.

Ms. BROWN. I don't know that you answered my question. I was looking to hear your answers, what do you think are the one or two things that we need to do?

Mr. HAMBERGER. I think we need to, number one, take a look at the fatigue issue, number two, take a look at the hazardous material issue. I was trying to associate myself with General Timmons there. So I guess those would be the two in the overall context.

Ms. BROWN. And of course, safety.

Mr. HAMBERGER. We are not recommending at this point any changes in the Federal Rail Safety Act.

Ms. BROWN. I see.

Mr. HAMBERGER. We will have some comments perhaps on the Hours of Service Act, but not on the Federal Rail Safety Act.

Ms. BROWN. We are going to talk about it as we move forward. One of the things we are going to be is fair.

Mr. HAMBERGER. Yes, ma'am.

Ms. BROWN. I want to thank all the witness in particular for the time and the lateness of the hour, for the valuable testimony of the members and the questions. The members of the Subcommittee have some additional questions for the witnesses, and we will ask you to respond to those in writing. The hearing records will be held open for those responses.

If there is no further business, I again thank the members of the Subcommittee and our witnesses and the Subcommittee stands adjourned.

[Whereupon, at 5:25 p.m., the subcommittee was adjourned.]

STATEMENT OF
THE HONORABLE CORRINE BROWN, CHAIRWOMAN
SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS
HEARING ON REAUTHORIZATION OF THE FEDERAL RAIL SAFETY PROGRAM
WEDNESDAY, JANUARY 31, 2007

The Subcommittee on Railroads, Pipelines, and Hazardous Materials will come to order.

I want to welcome the Members and witnesses to Part Two of our hearing on reauthorization of the Federal rail safety program.

In the interest of time, I will submit my opening statement for the record and reserve my remarks for the questioning of witnesses. But before recognizing Mr. Shuster for his opening statement, I ask unanimous consent to allow 30 days for all Members to revise and extend their remarks and to

permit the submission of additional statements and materials by Members and witnesses.

Without objection, so ordered.

Mr. Shuster.

Introduction of Panel II

I want to welcome Mr. Hamberger, who serves as president of the Association of American Railroads.

Next, we have General Timmons, who is president of the American Short Line and Regional Railroad Association.

We have Mr. Wytkind, who is president of the Transportation Trades Department of the AFL-CIO.

We have Mr. Rodzwicz, who is Rail Conference Director for the International Brotherhood of Teamsters. He is here representing the Brotherhood of Locomotive Engineers and Trainmen and the Brotherhood of Maintenance of Way Employees.

Finally, we have Ms. Shannon Van Dyck, who is an attorney from Minneapolis, Minnesota, representing the American Association for Justice.

We are pleased to have all of you here with us this morning. Your full statements will be placed in the record. We ask that all witnesses try to limit their testimony to a five-minute oral summary of their written statements, as a courtesy to other witnesses.

We will proceed in the order in which the witnesses are listed in the call of the hearing.

Mr. Hamberger, please proceed.

Closing Remarks

I thank the witnesses for their valuable testimony and the Members for their questions. The Members of the Subcommittee may have some additional questions for the witnesses and we will ask you to respond to these in writing. The hearing record will be held open for these responses.

If there is no further business, I again thank the Members of the Subcommittee and our witnesses. The Subcommittee stands adjourned.

Statement by Congressman Jerry F. Costello
Committee on Transportation and Infrastructure
Subcommittee on Railroads
Hearing on Reauthorization of the Federal Rail Safety Program
January 31, 2007

Thank you, Madame Chairwoman. I am pleased to be here today as we evaluate the federal rail safety program in preparation for reauthorization. I would like to welcome today's witnesses.

Aside from the grade crossing issues I referenced yesterday, I also wanted to highlight another area – railroads providing prompt medical treatment to their workers. The state of Illinois passed a law in 2006 which was an agreement by the UTU and the railroads to protect the rights of workers to receive prompt medical treatment. The law said that railroads had to provide medical treatment or first aid treatment to an employee who has been injured during his/her employment. Any such violations would be heard by the Illinois Commerce Commission. The railroads turned around and sued, saying this issue is not a state issue but a federal issue. The courts agreed and the state of Illinois law is null and void.

So, because the courts have stated that providing railroad workers with prompt medical care is a federal issues, I am interested to hear from our witnesses on this issue as well as work closely with Chairwoman Brown on the reauthorization of rail safety to include a provision that protects the rights of workers.

I look forward to today's hearing as we discuss grade crossing safety and efforts to reduce the incidence of grade crossing accidents.

STATEMENT OF

EDWARD R. HAMBERGER
PRESIDENT & CHIEF EXECUTIVE OFFICER
ASSOCIATION OF AMERICAN RAILROADS

BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS

HEARING ON THE REAUTHORIZATION OF THE FEDERAL RAIL SAFETY PROGRAM

JANUARY 31, 2007

Association of American Railroads
50 F Street NW
Washington, DC 20001
202-639-2100

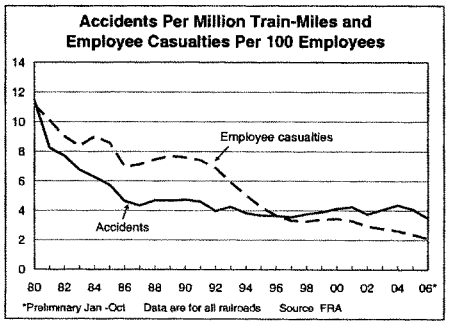
Introduction

On behalf of the members of the Association of American Railroads (AAR), thank you for the opportunity to address rail safety. AAR members account for the vast majority of freight railroad mileage, employees, and traffic in Canada, Mexico, and the United States.

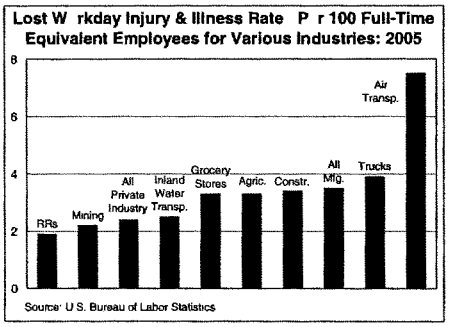
For railroads, pursuing safe operations is not an option, it is an imperative. It makes business sense and it's the right thing to do. And railroads have become much safer. In fact, based on preliminary data for the first ten months, 2006 was the safest year ever for the railroads by the three most commonly cited rail safety measures. The train accident rate, the employee casualty rate, and the grade crossing collision rate all reached record lows.

Overview of Rail Safety

Through massive investments in safety-enhancing infrastructure and technology (much of it made possible by the deregulation embodied in the Staggers Rail Act of 1980); extensive employee training; cooperative efforts with labor, suppliers, customers, communities, and the Federal Railroad Administration (FRA); cutting-edge research and development; and steadfast commitment to applicable laws and regulations, railroads are at the forefront of advancing safety.



The overall railroad industry safety record is excellent, reflecting the extraordinary importance railroads place on the safety of their employees and the communities they serve. From 1980-2005, railroads reduced their overall train accident rate by 64 percent and their rate of employee casualties by 79 percent. And rail safety is continuing to improve. As noted above,



data for 2006 through October show continued improvements in the three major rail safety measures, with record lows for the train accident rate, the employee casualty rate, and the grade crossing incident rate. Railroads have lower employee injury rates than other modes of transportation and most other major industry groups, including agriculture, construction, manufacturing, and private industry as a whole. Available data also indicate that U.S. railroads have employee injury rates well below those of most major foreign railroads.

Railroads are proud of their safety record, which results from railroads' recognition of their responsibilities regarding safety and the enormous resources they devote to its advancement. At the same time, railroads want rail safety to continue to improve. The rail industry is always willing to work cooperatively with you, other policymakers, the FRA, its employees, and others to find practical, effective ways to make this happen.

Below I will discuss several important topics associated with rail safety, discuss ways that railroads are working to advance safety in those areas, and discuss steps that we believe policymakers should take (or not take) to promote rail safety.

Role of Technology

Numerous past and current initiatives to research, test, and apply advanced technologies are enhancing safety on our railroads.

Much of this new technology has been (or is being) developed and/or refined at the Transportation Technology Center, Inc. (TTCI) in Pueblo, Colorado. A wholly-owned subsidiary of the AAR, TTCI is the world's finest rail research facility. Its 48 miles of test

tracks, highly sophisticated testing equipment, metallurgy labs, simulators, and other diagnostic tools are used to test track structure, evaluate freight car and locomotive performance, assess component reliability, and much more. The facility is owned by the FRA but has been operated (under a competitively-bid contract with the FRA) by TTCI — which is responsible for all of its operating costs and some of its capital costs — since 1984. The rail industry is pleased that some members of this committee have had the opportunity to see TTCI in person, and I extend an open invitation to others on this committee, especially the new members, to visit the facility when they can.

Just a few of the many technological advances that contribute to improved rail safety are described below. Many of these advances are preventive, designed to help protect freight cars, locomotives, track, and cargo before accidents or damage occurs.

- *Wayside detectors* identify defects on passing rail cars — including overheated bearings and wheels, dragging hoses, deteriorating bearings, cracked axles and wheels, and excessively high and wide loads — before structural failure or other damage occurs. Some of the newest wayside detectors use *machine vision* to perform higher-accuracy inspections through the use of digitized images. Tests at TTCI have revealed that it is possible to inspect wheels of moving trains using *ultrasonic probes*. Further tests of this system are underway, as are tests on ways to better understand and prevent *axle fatigue*.
- *Wheel profile monitors* use lasers and optics to capture images of wheels. The images show if wheel tread or flanges are worn and, consequently, when the wheels need to be removed from service before they become a problem.
- Trackside *acoustic detector systems* use "acoustic signatures" to evaluate the sound of internal bearings to identify those likely to fail in the near term. These systems supplement or replace existing systems that identify bearings already in the process of failing by measuring the heat they generate. This technology allows bearings to be replaced before they overheat and fail.
- Wheels constructed with stronger *micro-alloy metals* that resist damage and withstand higher service loads are being developed.
- Advanced *track geometry cars* use sophisticated electronic and optical instruments to inspect track conditions, including alignment, gauge, and curvature. TTCI is developing an on-board computer system that provides an even more sophisticated analysis capability of track geometry, predicting the response of

freight cars to track geometry deviations. This information helps railroads determine track maintenance needs.

- *Improved metallurgy* and *premium fastening systems* have enhanced track stability, reducing the risk of track failure leading to derailments.
- *Rail defect detector cars* are used to detect internal rail flaws. The AAR and the FRA have jointly funded a Rail Defect Test Facility at TTCI that railroads and suppliers use to test improved methods for detecting rail flaws. In 2005, the capabilities of a prototype of the world's first laser-based rail inspection system were tested at TTCI. It is now being demonstrated in revenue service.
- *Ground-penetrating radar* and *terrain conductivity sensors* are being developed that will help identify problems below the ground (such as excessive water penetration and deteriorated ballast) that hinder track stability.
- Major U.S. railroads are deploying *remote control locomotive technology* (RCL) to improve rail safety. RCL allows rail personnel on the ground to operate and control locomotives in rail yards through the use of a hand-held transmitter that sends signals to a microprocessor on board a locomotive. In a March 2006 report, the FRA found that "[e]mployee injury rates were approximately 20 percent lower for RCL operations than for conventional switching operations..."
- *Electronically-controlled pneumatic (ECP) brakes* are being tested in revenue service. In an ECP braking system, an electronic signal applies the brakes on each car in a train almost instantaneously, resulting in a much shorter stopping distance, reduced slack, and improved train control. (The standard air brake system in use today sends an air pressure signal for cars to brake, slowing the cars one-by-one as the air pressure moves from car to car.) The FRA recently announced its intent to issue a notice of proposed rulemaking later this year to revise the federal brake system safety standards to encourage railroads to invest in and deploy ECP brake technology.
- Because a relatively small percentage of freight cars (so-called "bad actors") can cause an inordinately high percentage of track damage and have a much higher than typical propensity for derailment, TTCI is working on ways to identify poorly performing freight cars as they pass across *truck performance detectors* and *hunting detectors*.[1]
- Much of the research underway regarding track and infrastructure is related to *heavy-axle load* (HAL) service, which entails the use of heavier (and often longer) trains. HAL-related work is underway on rail steels, insulated joints, bridges, welding, specialized track components, and more.
- *Tank car enhancements* have helped railroads reduce the overall rail hazardous materials accident rate by 86 percent since 1980 and by 28 percent since 1990,

[1] In terms of rail cars, "truck" refers to the complete four-wheel assembly that supports the car body. "Hunting" is an instability, more prevalent at higher speeds, that causes a rail car to weave down a track, usually with the flange of the wheel striking the rail.

and railroads are constantly investigating ways to further enhance tank car safety. Hazmat safety will be discussed in much more detail below.

- Advanced *fault detection systems* monitor critical functions on locomotives. State-of-the-art locomotives today can have 20 or more sophisticated micro-processors that measure and check several thousand characteristics of locomotives and their operation.
- Railroads are constantly expanding their use of state-of-the-art global positioning systems, wireless technologies, and other *communications advances.*
- The *Integrated Railway Remote Information Service (InteRRIS)*, an advanced Internet-based data collection system with wide potential applicability, is under development at TTCI. An early project using InteRRIS collects data from wheel impact detector systems (which identify wheel defects by measuring the force generated by wheels on tracks) and detectors that monitor the undercarriage of rail cars (which identify suspension systems that are not performing properly on curves) along railroad rights-of-way. InteRRIS processes the information to produce vehicle condition reports. These allow equipment which is approaching an unsafe condition to be removed from service and repaired before an accident occurs.

Many of the technology advances mentioned above have been incorporated in the rail industry's Advanced Technology Safety Initiative (ATSI). ATSI has already improved safety. For example, preliminary data indicate that the rate of main track broken rail and broken wheel accidents per million freight train-miles in the 25 months following the October 2004 implementation of ATSI was 13 percent below that of the comparable 25-month period prior to implementation. That's equivalent to a reduction of 50 potentially serious main track accidents nationwide over the more recent 25-month period, or about two per month.

Train Control Technology

A technological advancement that deserves special mention is train control technology, which railroads believe will reduce the incidence of human-factors caused accidents.

Several major railroads are now developing and testing train control systems that can prevent accidents by automatically stopping or slowing trains before they encounter a

dangerous situation. Through predictive enforcement, train control technologies, in certain circumstances, could significantly reduce the incidence of train accidents caused by human error, especially train collisions and derailments due to excessive speed.

Train control systems are extremely complex. At a minimum, they must include reliable technology to inform dispatchers and operators of a train's precise location; a means to warn operators of actual or potential problems (*e.g.*, excessive speed); and a means to take action, if necessary, independent of the train operator (*e.g.*, stop a train before it reaches the physical limits of its operating authority). Some systems will also include additional features, such as expanding the ability to monitor the position of hand-operated switches. Perhaps the most critical element is sophisticated software capable of accommodating all of the variables associated with rail operations. When successfully implemented, these enhanced train control capabilities will enable trains to operate more safely than trains operate today.

Several major railroads are engaged in various projects to test elements of this new technology. For example, BNSF has done extensive and successful pilot testing of its version of train control (Electronic Train Management System – ETMS) in Illinois and elsewhere. As you may know, BNSF recently received final approval from the FRA to implement the technology on lines elsewhere on its system.

Additionally, train control projects in progress on other railroads promise to provide similar or enhanced functionality and safety benefits. These include CSX's Communications-Based Train Management (CBTM) system, Norfolk Southern's Optimized Train Control (OTC) system, and Union Pacific's Communications-Based Train Control (CBTC) system.

Implementing train control technology will require significant capital investments in wireless networks; sophisticated location determination systems; highly-reliable software; and

digital processors on board locomotives, in dispatching offices and, for some systems, along tracks.

Hazmat Transport

Each year, 1.7 to 1.8 million carloads of hazardous materials (hazmat) are transported by rail in the United States, with two-thirds moving in tank cars. "Toxic inhalation hazards" (TIH) — gases or liquids, such as chlorine and anhydrous ammonia, that are especially hazardous if released — are a subset of hazardous materials and are a major (though by no means exclusive) focus of hazmat-related rail safety efforts. In each of the past couple of years, railroads have transported just over 100,000 carloads of TIH, virtually all in tank cars.

Railroads recognize and deeply regret the occurrence of a few tragic accidents involving hazardous materials over the past couple of years. Nevertheless, the rail hazmat safety record is extremely favorable. In 2005, 99.997 percent of rail hazmat shipments reached their final destination without a release caused by an accident. Railroads reduced hazmat accident rates by 86 percent from 1980 through 2005.

Despite these positive trends, the current environment for the rail transportation of highly-hazardous materials, especially TIH, is untenable. Today, the federal government, through the railroads' common carrier obligation, requires railroads to transport these materials, whether railroads want to or not. But every time a railroad moves one of these shipments, it faces potentially ruinous liability. The revenue that highly-hazardous materials generate does not come close to covering the potential liability to railroads associated with this traffic, and the insurance industry is unwilling to insure railroads against the multi-billion dollar risks associated with highly-hazardous shipments.

Railroads face these huge risks for a tiny fraction of their business. In 2005, railroads moved just over 100,000 TIH carloads and nearly 37 million total carloads. Thus, shipments

of TIH constituted only about 0.3 percent of all rail carloads. And while accidents involving highly-hazardous materials on railroads are exceedingly rare, history demonstrates that railroads can suffer multi-billion dollar judgments, even for accidents where no one gets hurt and the railroads do nothing wrong.

For this reason, if the government continues to require railroads to transport highly-hazardous materials, the railroads' liability in the event of an accident should be limited. If railroads' risks are not limited, they will be forced to seek an elimination of their common carrier obligation to carry highly-hazardous traffic, or to challenge its applicability with regard to TIH and other highly-hazardous materials.

In the meantime, railroads support prompt, bold actions by all stakeholders to reduce the risks associated with hazmat transport.

What Railroads Are Doing

Railroads themselves are taking the lead. Indeed, railroads are constantly working to ensure the continued safety of hazmat transport:

- In December 2006, an industry committee approved a new standard for chlorine and anhydrous ammonia tank cars that will significantly reduce the risk of a release. (Anhydrous ammonia and chlorine combined account for around 80 percent of rail TIH movements.) The standard will be phased in beginning in 2008.[2]
- Railroads help communities develop and evaluate emergency response plans; provide training for more than 20,000 emergency responders each year through their own efforts and the Transportation Community Awareness and Emergency Response Program (TRANSCAER); and support Operation Respond, a nonprofit institute that develops technological tools and training for emergency response professionals.
- Railroads work closely with chemical manufacturers in the Chemical Transportation Emergency Center (Chemtrec), a 24/7 resource that coordinates and communicates critical information for use by emergency responders in mitigating hazmat incidents.

[2] The delay in implementation is due to an FRA request.

- Upon request, railroads provide local emergency response agencies with, at a minimum, a list of the top 25 hazardous materials transported through their communities. The list helps responders prioritize emergency response plans.
- For trains and routes carrying a substantial amount of highly-hazardous materials, railroads utilize special operating procedures to enhance safety.
- Railroads participate in a variety of R&D efforts to enhance tank car and hazmat safety. For example, the Tank Car Safety Research and Test Project (which is funded by railroads, tank car builders, and tank car owners) analyzes accidents involving tank cars to help identify the causes of tank car releases and prevent future occurrences.
- Railroads have developed and implemented a comprehensive Terrorism Risk Analysis and Security Management Plan and are working with the Department of Homeland Security and the Department of Transportation to identify opportunities to reduce exposure to terrorism on rail property.
- Railroads offer basic hazmat awareness training to all employees who are involved in hazmat transportation. Employees responsible for emergency hazmat response efforts receive far more in-depth training.
- As discussed earlier, railroads are pursuing a variety of technological advancements to enhance rail safety, including hazmat safety.
- Railroads are working with TIH manufacturers, consumers, and the government to explore the use of coordinated routing arrangements to reduce the mileage and time in transit of TIH movements.

What Manufacturers and Consumers Should Do

Manufacturers and consumers of hazardous materials should take a number of steps to help ensure hazmat safety.

First, concerted efforts should be made to develop and utilize "inherently safer technologies," which involve the substitution of less-hazardous materials for highly-hazardous materials, especially TIH, in manufacturing and other processes. As noted in a recent report by the National Research Council (part of the National Academy of Sciences), "the most desirable solution to preventing chemical releases is to reduce or eliminate the hazard where possible, not to control it." Ways this can be achieved include "modifying processes where possible to minimize the amount of hazardous material used" and "[replacing] a hazardous

substance with a less hazardous substitute."[3] In a similar vein, in a January 2006 report, the Government Accountability Office (GAO) recommended that the Department of Homeland Security "work with EPA to study the advantages and disadvantages of substituting safer chemicals and processes at some chemical facilities."[4]

One real-world example of product substitution occurred at the Blue Plains wastewater treatment facility just a few miles from the U.S. Capitol. Like many wastewater treatment facilities, Blue Plains used chlorine to disinfect water. Not long after 9/11, the facility switched to sodium hypochlorite, a safer alternative. Similarly, Milwaukee has substituted ozone treatment for chlorine purification.

Railroads recognize that the use of TIH cannot be immediately halted. However, over the medium to long term, product substitution would go a long way in reducing the risks in the hazmat logistical chain.

Second, manufacturers and receivers of TIH, in conjunction with railroads and the federal government, should continue to explore the use of "coordination projects" to allow TIH consumers to source their needs from closer suppliers. For manufacturers and users, this could involve "swaps." For example, if a chlorine user contracts with a chlorine supplier located 600 miles away, but another supplier is located 300 miles away, the supplier located 600 miles away might agree to allow the closer shipper to supply the user.

Third, hazmat consumers and manufacturers should support efforts aimed at increasing the safety and reliability of tank cars. You may have read recently, for example, about a collaborative public-private alliance involving the FRA, Dow Chemical, Union Pacific, and

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[3] *Terrorism and the Chemical Infrastructure: Protecting People and Reducing Vulnerabilities*, National Research Council – Board on Chemical Sciences and Technology, May 2006, p. 106.

[4] *Homeland Security: DHS is Taking Steps to Enhance Security at Chemical Facilities, but Additional Authority is Needed*, Government Accountability Office, January 2006, p. 7.

the Union Tank Car Company that focuses on the design and implementation of a next-generation rail tank car with enhanced ability to safely transport highly-hazardous materials.

What the Government Should (and Should Not) Do

The government too has a key role in issues associated with hazmat transport by rail. First, if the government requires railroads to transport highly-hazardous materials (via their common carrier obligation), it must address the "bet the company" risk this obligation forces railroads to assume.

Congress could address this inequity by creating a statutory liability cap similar to the one for Amtrak. (Amtrak's total liability for all claims from a single accident is capped at $200 million.) Alternatively, Congress could enact a Price-Anderson type solution. Price-Anderson limits liability in incidents involving the release of nuclear material and provides for a fund (to which owners of nuclear power plants contribute) to cover any damages that exceed the limit. Under a similar proposal for highly-hazardous materials, a railroad would be liable for some defined amount of damages arising from a rail accident involving these materials. Damages above that amount would be paid from a fund to which producers and end-users of these materials would contribute.

Both of these options would leave railroads liable for substantial amounts, thereby giving them a further incentive — on top of their already aggressive pursuit of safe operations — to continue their ongoing, successful record of safety improvement.

Absent these two alternatives, Congress should relieve railroads of their common carrier obligation to haul TIH and other highly-hazardous materials. Like other transportation providers, railroads should be able to decide for themselves whether to accept, and at what price they are willing to accept, such materials for transportation.

Second, the government should help facilitate the "coordinated routing arrangements" and "coordination projects" described earlier.

Third, the government should encourage the rapid development and use of "inherently safer technologies" to take the place of TIH and other highly-hazardous materials.

Fourth, the government should reject proposals that would allow state or local authorities to ban hazmat movements through their jurisdictions. Bans might have a certain intuitive appeal, but the fact is they would not eliminate risks, but instead would shift them from one place to another and from one population to another. In doing so, bans could foreclose routes that are optimal in terms of overall safety, security, and efficiency and force railroads to use less direct, less safe routes. The result would likely be an *increase* in exposure to hazmat release and *reduced* safety and security. It has been estimated, for example, that a ban on hazmat transport through the District of Columbia would result in some 2 million additional hazmat car-miles as carriers had to use circuitous alternative routes.

Moreover, if hazmat transport were banned in one jurisdiction, other jurisdictions would want to follow suit. Already, numerous cities across the country are considering hazmat bans. An integrated, effective national network requires uniform standards that apply nationwide. Thus, if policymakers determine that hazmat movements should be banned, they should be banned nationwide, rather than locality-by-locality.

Finally, the government should reject proposals that would force railroads to provide local authorities advance notification of hazmat movements through their jurisdictions.

Hazmat prenotification will not accomplish the goals of those seeking it, for several reasons. First, upon request, the rail industry already notifies communities of, at a minimum, the top 25 hazardous commodities likely to be transported through their area. Railroads also provide training for hazmat emergency responders in many of the communities they serve, and

already have procedures in place to assist local authorities in the event of hazmat incidents. Thus, information obtained by local authorities through a pre-notification system would not improve their ability to respond to hazmat incidents in any meaningful way.

Second, pre-notification would vastly increase the accessibility of hazmat location information. Making this information more accessible could increase vulnerability to terrorist attack by magnifying the possibility that the information could fall into the wrong hands.

Third, at any one time, thousands of carloads of hazmat are moving by rail throughout the country, constantly leaving one jurisdiction and entering another. The vast majority of these carloads do not — and due to the nature of rail operations, cannot be made to — follow a rigid, predetermined schedule. The sheer quantity and transitory nature of these movements would make a workable pre-notification system extremely difficult and costly to implement for railroads and local officials alike. That's why the fire chief of Rialto, California, commented, "You'd have to have an army of people to stay current on what's coming through. I think it wouldn't be almost overwhelming. It would be overwhelming." The greater the number of persons to be notified, the greater the difficulty and cost.

Fourth, in the event of a rail-related hazmat incident, train consists are available to emergency responders.

Fatigue in the Rail Industry

My understanding is that this subcommittee will be holding a hearing on rail fatigue in a couple of weeks. At that time, I will discuss the fatigue issue in more detail. I also call your attention to my testimony to this subcommittee on fatigue on July 25, 2006.

For now, let me say simply that it is not in the best interest of railroads to have employees who are too tired to perform their duties properly. That's why railroads have long partnered with their employees to gain a better understanding of fatigue-related issues and find

effective, innovative solutions to fatigue-related problems. However, because factors that can result in fatigue are multiple, complex, and frequently intertwined, there is no single solution.

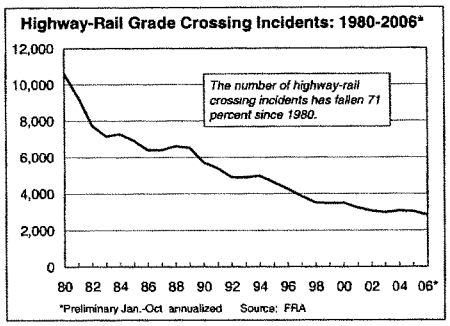
Indeed, scientific research to date suggests that flexibility to tailor fatigue management efforts to address local circumstances is key to the success of these programs. Significant variations associated with local operations (*e.g.*, types of trains, traffic balance, and geography), local labor agreements, and other factors require customized measures. Consequently, a one-size-fits-all government approach is unlikely to succeed as well as cooperative efforts tailored to individual railroads. Today, all major railroads are pursuing a variety of fatigue countermeasures, based on what they've found to be most effective for their particular circumstances.

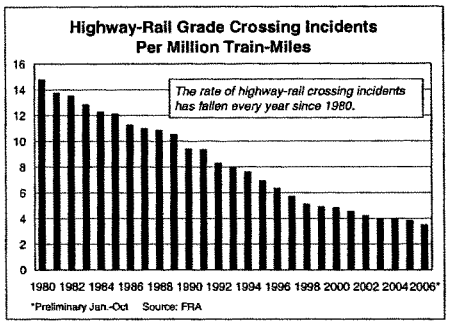
Railroads recognize that combating fatigue is a shared responsibility. Employers need to provide an environment that allows the employee to obtain necessary rest during off-duty hours, and employees must set aside time when off duty to obtain the rest they need.

Highway-Rail Grade Crossings and Trespassers

Collisions at grade crossings, along with incidents involving trespassers on railroad rights-of-way, are critical safety problems. In 2005, these two categories accounted for 92 percent of rail-related fatalities. Although these incidents usually arise from factors that are largely outside of railroad control[5], and even though highway-rail crossing warning devices are properly considered motor vehicle warning devices there for the benefit of motorists, not trains, railroads are committed to efforts aimed at further reducing the frequency of crossing and trespasser incidents.

[5] A June 2004 report by the U.S. DOT's Office of Inspector General (OIG) confirmed that motorist behavior causes the vast majority of grade crossing accidents. According to the OIG report, "Risky driver behavior or poor judgment accounted for 31,035 or 94 percent of public grade crossing accidents" from 1994-2003. The remaining accidents included such circumstances as vehicles stuck, stalled, or abandoned at crossings.





Much success has already been achieved. In 1980, according to FRA data, 10,611 grade crossing collisions resulted in 833 fatalities and 3,890 injuries. In 2005, 3,041 collisions (down 71 percent) involved 357 fatalities (down 57 percent) and 1,010 injuries (down 74 percent). The rate of grade-crossing collisions per million train-miles fell 74 percent from 1980 through 2005, and has fallen every year since 1978. Preliminary data for 2006 show further reduction of more than 4 percent. And because total exposure (train-miles multiplied by motor vehicle-miles) has risen sharply over time, the reduction in crossing incidents and casualties per unit of exposure has been even higher.

The Section 130 program, a national highway safety program created by the Highway Safety Act of 1973, is a major reason for the impressive grade crossing safety gains. Under the program, funds are apportioned to states each year for the installation of new active warning devices such as lights and gates, upgrading existing devices, and replacing or improving grade crossing surfaces. The Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU), which Congress passed in the summer of 2005, increased to at least $220 million per year (from approximately $155 million per year) the federal funding directed to the Section 130 program. The rail industry

commends and thanks the members of this committee and others in Congress for their support of this critical program.

Railroads continue to work hard to improve grade-crossing safety, including cooperating with state agencies to install and upgrade grade crossing warning devices and signals (and bearing the cost of maintaining those devices); helping to fund the closure of unneeded or redundant crossings; and supporting the national Operation Lifesaver grade crossing and pedestrian safety program. Railroads spend more than $250 million annually to improve, operate, and maintain grade crossings.

A recent initiative that will result in improved safety is the use of "stop" or "yield" signs along with crossbucks at grade crossings. The National Committee on Uniform Traffic Control Devices has recommended revising the Manual of Uniform Traffic Control Devices (MUTCD) to require the use of stop or yield signs in conjunction with crossbucks to make it clear what is expected of motorists at crossings. The AAR strongly supports amending the MUTCD as recommended by the National Committee and follow through on the installation of signs. AAR also supports FRA's recommendation, included in its May 2006 report to Congress on emergency notification systems for grade crossings, that signs comply with the MUTCD recommendations.

The report to Congress also recommended that Class I railroads continue their emergency notification programs, which provide the public with telephone numbers, posted at grade crossings, that can be called in the event of grade-crossing emergencies. AAR's member railroads, of course, will continue these programs.

Comprehensive Highway-Rail Grade Crossing Safety Agenda

A comprehensive agenda of engineering, education, and enforcement actions should be implemented so that further improvement in crossing safety can be achieved. Congress and

the federal government should adopt and implement the following set of grade crossing safety and trespasser prevention initiatives:

- Adopt a uniform national grade crossing closure process, combined with a freeze on the overall number of grade crossings within each state.
- Require the adoption of highway design standards that ultimately eliminate grade crossings on the National Highway System.
- Redefine "private grade crossings" in such a manner that all grade crossings that are routinely accessible to the general public are eligible for Section 130 funding.
- Fund a research and development program to design effective low-cost active warning systems for grade crossings, and continue evaluations of the effectiveness of more advanced warning device systems such as four quadrant gates.
- Enhance grade crossing traffic law enforcement by requiring grade crossing safety as part of commercial driver's license educational curricula and by maintaining tough grade crossing traffic violation penalties.
- Initiate active enforcement programs with local police agencies — *e.g.*, encourage video enforcement and establish and fund a program for state and local law enforcement officers to serve in FRA's regional offices as liaisons for grade crossing and trespassing matters with state and local law enforcement organizations.
- Require a minimum set-back or physical safety barrier between active railroad tracks and adjacent parallel trails and paths.
- Continue to fund the national Operation Lifesaver grade crossing and pedestrian safety program.
- Increase federal liability insurance requirements for contractors whose funded projects interface with or impact a railroad.

Trespassers

For many years, significantly more fatalities on railroad property have been associated with trespassers than with highway-rail grade crossing accidents. It is an unfortunate reality that too many people inappropriately use railroad property for short cuts, recreation, or other purposes, sometimes with terrible results. Railroads are engaged in ongoing efforts to educate the public that, for their own safety, they should stay off rail property.

Each year, scores of people tragically choose to end their life by stepping or lying in front of a train. To help prevent the tragedy of suicide, railroads support the Suicide Prevention Action Network (SPAN USA), a charitable organization dedicated to preventing suicide through public education and awareness; community action; and federal, state, and local grassroots advocacy. In addition, through its Railroad Research Foundation, the AAR is researching the prevalence of, and underlying causal factors for, rail-related suicides. Such understanding could facilitate countermeasures to reduce suicides on railroad rights-of-way.

P rformance Standards

There are two general approaches to workplace safety regulation: design-based standards and performance standards.

Design-based standards specify the precise characteristics of facilities, equipment, and processes a firm must use in the manufacture or delivery of its product or service. The FRA relies overwhelmingly on design-based standards in regulating rail safety. Design-based standards are costly for both railroads and the FRA to administer and maintain. They also tend to impede innovation by "locking in" existing designs, technology, and ways of thinking.

The discolored wheel rule provides a classic example of a design-based standard that discourages new technology. This FRA rule required railroads to remove freight car wheels that showed four or more inches of discoloration, on the grounds that such discoloration could portend wheel failure. However, research demonstrated conclusively that discoloration in new heat-treated, curved-plate wheels did not portend failure. Despite this evidence, the FRA took more than a decade to exempt such wheels from the requirement. During this period, railroads had to discard perfectly safe wheels at a cost that reached $100 million per year.

In contrast to design-based standards, *performance-based standards* define the desired result, rather than mandate the precise characteristics that a workplace must exhibit. Performance-based goals focus attention and effort on the outcome, not the method.

Under one type of safety regime based on performance standards, each railroad would have goals for train safety (*e.g.*, accidents per million train-miles) and employee safety (*e.g.*, injuries per 100 employees) as part of a comprehensive risk management plan, based on targets established by the industry and approved by the FRA. If a railroad failed to meet these goals, it would come under increased FRA scrutiny, be required to specify how it planned to correct the problems, and eventually be subject to monetary penalties or even a return to design-based regulation. While some (but not all) of the old regulations would be suspended under a performance-standard regime, the FRA would retain the power to conduct safety audits and to impose emergency directives at any time to protect public safety.

Under safety performance standards, railroads would have the opportunity and incentive to achieve safer operations as efficiently as possible. Performance standards would rely on the superior knowledge of railroads and their employees and would give railroads the discretion to experiment with new technologies and processes to improve safety. The result would be superior safety performance at a lower cost to railroads and their customers.

Risk-based performance standards represent a reform, not an abandonment, of safety regulation. Except in emergencies or after continued failure to meet targets, the FRA would no longer specify how a railroad would achieve its safety goals. Instead, the FRA would oversee and validate the goal-setting process, ensure that measures and data are accurate, and impose any necessary sanctions.

Railroads have proposed a performance standard pilot project focused on locomotive inspections. In addition, the standards the industry committee issued in December 2006 for

anhydrous ammonia and chlorine tank cars incorporate performance standards. The committee standards mandate tank thickness, head shields, and top-fittings protection. However, tank car owners or builders can petition the committee to accept a tank car that, in lieu of the specified tank thickness and head shields, achieves the same safety improvement.

Performance standards have been used elsewhere in government. For example, the 1990 Amendments to the Clean Air Act directed electric utilities to limit their emissions of sulfur dioxide and nitrogen oxide, but did not tell the utilities how to meet those standards. The 1996 Accountable Pipeline Safety and Partnership Act promotes the use of risk management plans that are essentially a performance-standard approach.

Conclusion

Thank you for the opportunity to testify on this critical topic. The railroad industry is committed to working with Congress, the FRA, its customers, its employees, and others to ensure that rail safety continues to improve.

U.S. Department
of Transportation

**Fed ral Railroad
Administration**

Administrator

**1120 Vermont Ave., NW.
Washington, DC 20590**

JUL _ 6 2003

Mr. Freddie N. Simpson
President
Brotherhood of Maintenance of Way Employes Division
International Brotherhood of Teamsters
20300 Civic Center Drive, Suite 320
Southfield, Michigan 48076-4169

Dear Mr. Simpson:

I am writing in response to the May 31, 2002, Petition for Reconsideration, in which the Brotherhood of Maintenance of Way Employes (BMWE) requested that the Federal Railroad Administration (FRA) amend the Final Rule for Locomotive Cab Sanitation Standards (Docket No. FRA-2000-8545). FRA issued a final rule on Locomotive Cab Sanitation Standards on April 4, 2002. *See* 67 FR 16032. The rule amended FRA's regulations by adding standards for toilet and washing facilities for employees who work in locomotive cabs.

You stated in your Petition that the rule includes provisions that "permit discharge of toilet effluent from locomotive conveyances onto the railroad right-of-way." You assert that "the discharge . . . poses a significant health and safety risk to roadway workers and the general public and will adversely impact the environment through the introduction of contaminants into surface and ground water resources."

At the outset it must be noted that, although the rule does not prohibit discharge of effluent, neither does it authorize same. Rather, the subject matter of the rule is provision of sanitary facilities for locomotive crews.

In your Petition, you request that the rule be amended to include three additional requirements:

1) Railroad conveyances shall be prohibited from discharging live organisms along with railroad right-of-way;
2) On-board toilet facilities shall be maintained in accordance with the manufacturer's recommended maintenance procedures; and
3) FRA shall conduct annual random statistical sampling of discharged effluent for live organisms from 10 percent of the equipped locomotive fleet annually.

2

The issues surrounding the maintenance and operation of Microphor® Biological Waste Treatment Systems (hereinafter "Microphor® toilet systems") were discussed at length during Railroad Safety Advisory Committee (RSAC) Working Group meetings, as well as during the rulemaking public hearings and in rulemaking documents. The BMWE and Brotherhood of Railroad Signalmen (BRS) noted that Microphor® toilet systems discharged waste along the right-of-way. They also maintain that the discharge is often untreated or poorly treated waste and that it exposes employees to a high risk of illness and/or a highly unpleasant work environment.

The Association of American of Railroad's (AAR) position was that the toilet system by design discharges water free of impermissible levels of microorganisms. They stated that they were not aware of any injury or illness caused by the use of the Microphor® toilet systems, explained that the systems processes waste without exposing employees to waste or chemicals, and noted that the system has improved over time.

Following the discussions about the NPRM, FRA added language to the rule text, to address the concerns of the BMWE and BRS. FRA added language to the Final Rule that was not found in the NPRM. Specifically, section 229.139 was changed; it provides that the toilet must be "operated as intended." FRA and the Working Group believed that, although directed primarily at sanitary conditions for cab employees, this change from the NPRM would also help to resolve some of the issues surrounding the Microphor® toilet system and the composition of its discharge, since with proper maintenance, the system should discharge only water onto the right-of-way.

The FRA stands by the position articulated in its Final Rule for Locomotive Cab Sanitation Standards. FRA does not believe it is appropriate to implement the additional requirements which you recommend. Based on the information available to FRA at this time, FRA has determined that it is not appropriate to impose a strict prohibition on discharge from Microphor® toilet systems.

The FRA cited several reasons for that determination in its Final Rules and reiterates those reasons here. First, the subject matter of this rulemaking was sanitary conditions in locomotives. The issue of discharge from interstate conveyances, thus, was not within the scope of this rulemaking.

Second, FRA does not have primary responsibility for discharges from interstate conveyances. The primary responsibility rests with the U.S. Food and Drug Administration (FDA). The FDA has regulations that address such discharges, and the FDA is responsible for enforcing those regulations. FDA standards prohibit the disposal of untreated waste and permit the discharge of waste that has been treated to prevent disease. *See* 21 CFR §1250.51. In 1973, the FDA, pursuant to its authority, examined the Microphor® toilet system and determined that it meets the standard if the unit is operating as intended.

3

Third, a prohibition would have an enormous adverse impact. There are a large number of units currently in use throughout the country. A prohibition on their use would result in substantial costs with undetermined benefits. Further, alternative systems all have substantial drawbacks; hence, the agency could have no confidence that overall employee health and safety would be advanced.

While FRA stands by its position, FRA nonetheless reiterates its belief that this is a potentially serious issue that requires due consideration. FRA is concerned with the safety and health of railroad employees. To that end, and in order to ascertain the exact dimensions of this issue, FRA has continued to investigate this issue.

Since the issuance of the Final Rule, FRA has conducted testing on Microphor® toilet systems. The purpose of FRA's testing has been to determine whether Microphor® toilet systems properly treat effluent before discharging it onto railroad track beds. With the assistance of private laboratories, FRA collected effluent samples from 42 locomotives and analyzed the samples for fecal coliform, total free residual chlorine, and total chlorine residual.

The FRA study of Microphor® toilet systems' performance in locomotives in service showed:

- Microphor® toilet systems that were maintained and operating properly, i.e.; that required a minimal number of flushes to obtain effluent, and had a sufficient level of chlorination, had an effluent stream with no detectable level of pathogens.

- Microphor® toilet systems that were in a near empty state, that is, they required a significant number of flushes to cause an effluent to discharge, or where the chlorination system was not properly charged, or both, resulted in effluent that did contain significant levels of pathogens. However, when sampled over time even these levels diminished significantly as the contact with the disinfectant chlorine had its desired effect.

The FRA concludes from this study that the change in language cited above, that the Microphor® toilet systems must be "operated as intended," and if so operated will result in effluent that will not contain pathogens at levels that will cause illness among BMWE members.

The AAR, in conjunction with Microphor® , has also conducted testing on Microphor® toilet systems. The AAR presented its findings to FRA in a September 2003 report entitled "Analysis of Locomotive Toilet Usage." The AAR's purpose was to determine the typical usage patterns of toilets installed on locomotives. The AAR collected data from 40 locomotives over a 4 month period recording over 13,500 flushes. Microphor® did testing of the one and two quart/flush capacity toilets used for locomotive service in a laboratory setting to determine what number of consecutive flushes would result in the systems' capacities for disinfection to be overwhelmed. AAR then examined the usage patterns they had documented to determine how many instances of real world use could have resulted in effluent that exceeded the Microphor® determined "excessive use" rate. In all but two instances, the AAR found that the use rates seen would have

been within the Microphor® criteria for ensuring that there were no discharges of effluent with live coliform bacteria. The AAR concluded that Microphor® toilet systems were sufficient for usage along railroad right-of-ways.

While the FRA does not view this as a true "real world" performance study, the data does suggest that under conditions of use similar to those documented by the AAR the Microphor® toilet systems perform as intended to disinfect toilet effluent.

The FRA also consulted with the Food and Drug Administration (FDA) about locomotive sanitation issues with respect to Microphor® toilet systems. FDA has approved the use of Microphor® toilet systems for locomotive use, and has primary responsibility for discharges from interstate conveyances. FDA shares FRA's view that Microphor® toilet systems do not pose a public health risk.

The FDA representatives noted that even if a bacteria or virus survives the treatment process, that a worker would need to have direct contact with the untreated waste product through touch or aerolization within a short time after discharge for any contamination to occur. Any potential health risk created by the use of Microphor® toilet systems is minimal.

The FRA stands by the position articulated in its Final Rule for Locomotive Cab Sanitation Standards. FRA does not believe it is appropriate to implement the additional requirements which you recommend. Based on the information available to FRA at this time, FRA has determined that it is not appropriate to impose a strict prohibition on discharge from Microphor® toilet systems.

However, FRA inspectors will continue to note the conditions of these toilets and work with the railroads to promote appropriate maintenance of this system.

In conclusion, FRA would like to thank the BMWE for bringing these concerns to our attention. Your petition has resulted in a heightened focus on locomotive cab sanitation issues by the FRA, the FDA, and the railroad industry. We appreciate your dedication to our shared mission of railroad safety.

Sincerely,

Joseph H. Boardman
Administrator

Questions for the Record
Submitted on behalf of Congresswoman Grace Napolitano

1. The Union Pacific Railroad Company has been replacing track in 1.5 mile segments along the Alameda Corridor East in Los Angeles County. This has closed multiple Grade crossings for 4-5 days. The city of Industry and Los Angeles County emergency service officials have said that the initial track work was costing them $50,000 in order to create Emergency Service Centers along the railroad. These centers allow emergency service providers to serve communities that may be cut off from emergency services due to the grade crossing closures. Multiple cities in East Los Angeles have claimed that the railroad company has not given them enough time to prepare for the closures.

   When railroad companies close down multiple grade crossings for track work, it forces cities to provide additional emergency services in order to have access on both sides of the track for emergencies. How do railroad companies repay emergency service agencies for this added service?

   Are railroad companies required to provide cities and communities with notice of when railroad crossings are going to be closed due to track work?

2. One of my biggest concerns is regarding the life of the rail. How do railroad companies determine when it is time to replace the tracks? Have there been any issues regarding the type of steel used in laying new rails?

3. What research and development has been done to prevent cracks in insulated joint bars?

4. How are railroad companies working with cities and states to support the construction of grade separation projects?

5. How much have railroad companies invested in the construction of grade separations across the country?

6. Is there technology available to inspect Joint Bar Cracks? Can it detect hairline fractures within joint bars? How is this equipment being used?

Answers to Questions Posed by Congresswoman Napolitano

January 31, 2007 Hearing

Answer to Question #1

Union Pacific Railroad has invested over $60 million in its two main Los Angeles subdivisions in 2006 and 2007. The 2007 project will be completed in mid-March. At that point, 208,000 concrete ties and 79.8 miles of new continuously welded rail will have been installed. In addition, as part of this project, steel support plates have been installed underneath insulated joint bars. The plate is a quarter inch thick steel and spans three ties. The machine that does this work is very large as the front of the machine takes up the existing rail and ties, and the back part of the machine puts in the concrete ties and new rail. It moves along the track at 2 mph.

In order for this machine to go over a crossing, the crossing must be dismantled and put back together again after the work has been completed. This usually requires the crossing to be closed for several days. There are both national and state requirements for closing a crossing, and Union Pacific followed all proper procedures in Los Angeles. Prior to work commencing, Union Pacific contacted the appropriate local governmental authorities to arrange for closure, and all required permits were granted. In most cases, there are adjacent crossings where traffic can be detoured. In addition, Union Pacific notified and worked with the fire and emergency response departments in the affected communities to coordinate the closings so that emergency services would not be disrupted. It is my understanding that Union Pacific received a letter from a number of Fire Departments praising them for their cooperation and professionalism.

There is not a requirement for railroads to reimburse fire and/or emergency response departments for additional costs they may incur due to the closure of the crossing. However, I believe in this case, Union Pacific has offered to reimburse those costs.

Answer to Questions #2 and 3

Railroads measure wear on the rail and replace it when about 30% of the railhead has been worn away. This limit has been established based on the strength of the remaining rail to carry the applied loading. Rail may also be replaced if the rate of internal fatigue cracks over a length of track becomes too high. But, reaching the wear limits is the most common reason to replace rail. Improvements in rail quality and in rail flaw detection have improved safety and allow railroads to leave rail in service longer while controlling the occurrences of fatigue defects.

New rail is a major technical triumph for the railroad industry. Rail performance and quality has improved significantly over the past 25 years. New rail installed in high traffic mainlines today is expected to provide up to 2,000 Million Gross Tons (MGT) of

service (or about 10 years on the most heavily used tracks and 40 years on most mainlines). 25 years ago, the expected life of rail in similar service was 500 MGT or 3 years on the most heavily used lines and 10 years on typical lines. The improvements have come from better steel making processes and better rail maintenance technology in the field resulting from cooperative research programs sponsored by AAR, FRA, and rail suppliers.

Insulated joint bar cracking is the third leading cause of insulated joint failure. In this case failure does not necessarily mean an unsafe condition that leads to derailment. Failure of an insulated joint can be an electrical failure which results in the signal system stopping trains. In fact, insulated joints are not a major cause of accidents. They are designed to fail electrically before they fail mechanically. Thus, the signal system finds the electrical failure and slows or stops trains while the track is still intact. Research and developments by the AAR and railroad industry in foundation design, joint bar design and epoxy materials and surface preparation has produced some recent successes. The average life of an insulated joint in heavy axle load coal service has doubled in the last two years. The work has been aimed at reducing the leading cause of IJ failure: epoxy shear failures. But, the effect of improved foundations, designs and epoxy technology is to lower the stresses on joint bars and fasteners, too.

A potentially more significant safety problem for the industry is the failure of non-insulated or mechanical joint bars. These are often not found by the signal system, if in signaled track due to redundant electrical paths. Most of the research being done for insulated joints, such as the foundation and joint bar design work, also applies to mechanical joints. Additionally, use of identity tags, such as RFID tags, will allow the industry to track the service history of joint bars. Currently, the bars are recycled and re-used as needed in track. The history of each bar is not tracked. In some cases, the bars may be receiving more load cycles than designed for.

Answer to Questions #4 and 5

Nothing is more important to railroads than the safety of their employees and the communities in which they operate. Collisions at highway-rail crossings are critical rail-involved safety problems. Although such incidents generally arise from factors that are largely outside of railroad control (i.e., inappropriate motorist behavior), railroads are constantly and actively engaged with federal, state, and local government authorities in efforts to enhance the safety of crossings. Indeed, railroad initiatives, along with those of other stakeholders, have resulted in a dramatic reduction in the rate of grade crossing collisions by 74 percent from 1980 through 2005, falling progressively over time.

Along with installing and upgrading warning devices at crossings, supporting the national and state Operation Lifesaver grade crossing and pedestrian safety educational programs, and closing unneeded and redundant crossings, grade separation is an important element of the overall crossing safety campaign. Although grade crossing improvements are recognized as having no ascertainable net benefit to railroads, the railroad industry

supports the U.S. Department of Transportation's (U.S. DOT) and the states' agendas to close, consolidate, and grade-separate grade crossings. In fact, the U.S. DOT has estimated that 25 percent of grade crossings can be eliminated by closure.

The determination of how many, which, and by what means highway-rail crossings should be improved is the responsibility of each state, with federal involvement. Railroads provide information on train operations as an input to the governments' decisions. Moreover, where projects impact railroad rights-of-way, railroads must review construction plans, develop agreements for construction with the governing highway authority, and provide oversight to ensure safety and minimize the disruption of freight and passenger rail operations. Once installed, the railroads bear the cost of inspecting and maintaining the warning devices and signals. Where a grade separation project eliminates a grade crossing with active warning devices, the involved railroad is required to contribute five percent of the total cost of the project.

The AAR does not maintain figures concerning the extent to which railroads have participated in the funding of grade separation projects. We do estimate, however, that railroads spend in excess of $250 million annually to improve, operate, and maintain highway-rail crossings.

Answer to Question #6

Technology is available to inspect joint bars for cracks. This is currently done visually by track inspectors in their regular track inspections. Additionally, Ensco has developed an automated joint bar inspection system for FRA. The system uses machine vision to detect cracking in joint bars. Images are recorded of each joint bar by an inspection vehicle. The images are later processed to identify cracks. The inherent weakness of the manual and automated visual inspections is that one does not have a line of sight to the areas that originate cracking. This is on the side of the bar facing the rail, near the bottom. Thus, the system may not provide much additional time for remedial action, as compared to manual visual inspection. One advantage of the automated machine vision system over manual inspection is that the repetitive process is suited to machine vision.

Additional technologies that are being developed include non-contact ultrasonic inspection systems. AAR is sponsoring R&D work to develop a laser based ultrasonic inspection. The same technology that has been proven for rail flaw inspection is being applied to joint bar inspection. This system is expected to inspect the entire joint bar and detect surface cracks and internal flaws that cannot be seen visually. Having a system that inspects the entire joint bar and finds smaller cracks than the current visual inspection will improve the safety and reliability of the railroad.

The laser based joint bar inspection system will be similar in operation to the laser based rail inspection system developed by TTCI and Tecnogamma, SPA., of Italy. It is a non-contacting system that will automatically find and inspect each joint bar as the rail flaw

inspection vehicle moves down the track. Inspection speeds will be similar to current rail flaw inspection systems (e.g. 10-15 mph).

Answer to Question Posed by Congressman Walz

January 31, 2007 Hearing

Question

At the January 31 House hearing on general railroad safety, Congressman Walz asked the following question:

> "My question when it comes to the railroads is, I am wondering, when I am hearing representatives from the people working on the railroad and they are telling me they do not have enough training and they are not comfortable with that, that makes me concerned that the institutionalized safety program is not there, that the ability to certify, to pre-operational checklist and all the things are not there. And I am concerned and think that the rail safety program should include those. I know that you are basing it more on performance based. I don't think you ever get to performance based unless you do those previous steps."

Answer

As presented at the January 31 hearing, the overall railroad industry safety record is excellent and reflects the extraordinary importance railroads place on safety. Part of this success is the result of world class employee training programs and Members and staff have an open invitation to visit a training facility in cities throughout the country to see first hand how the programs work.

Rules

Railroads have been called "five thousand mile-long outdoor assembly plants" and by their nature require a structured approach to operations and to safety. Every railroad has an Operating Rule Book and as Safety Rule Book establishing procedures and employees' knowledge of these rules is trained and tested.

Training

Railroads devote considerable resources to training employees. A new locomotive engineer, for example, will receive at least 15 to 20 weeks of classroom and on-the-job training as a conductor before beginning work. Locomotive engineer training will add an additional 20 – 25 weeks before they are certified and ready to work. Skills include railroad safety, operating rules, hazardous materials regulations, mechanical inspections and train handling. Classrooms include computerized locomotive simulators and portions of locomotive equipment including sections of actual diesel engines and air brake equipment. Regular testing ensures students are mastering the curriculum and locomotive engineers must pass a final certification test prior to commencing work.

Total costs to train a conductor and later an engineer range from $52,000 to more than $70,000 per individual.

Locomotive engineers receive recurrent annual training in classrooms and with computer-based training programs in addition to federally-mandated annual check rides and observation testing / training. Recertification training and testing occurs every three years and are filed with and audited by the Federal Railroad Administration. Job briefings can also be considered a form of recurrent training and engineers regularly hold job briefings with other crewmembers.

Employees who install and maintain signal systems also have formalized training programs typically in a 2-year apprentice program. Programs vary by the type of signal equipment used by the railroad but generally include between 8 - 10 weeks of classroom training followed supervised by on-the-job training. Skills include railroad safety, operating rules and signal rules governing inspections and signal equipment inspection and repair. Classrooms are equipped with actual signal equipment allowing students to practice repairing and adjusting. Training costs for apprentice signalman range between $22,000 and $32,000 per individual.

Signalmen also receive recurrent training that ranges from one or two days to several weeks and can include, in addition to standard refresher courses, training on new technologies and changes in federal regulations. In addition, signalmen hold regular job briefings.

Other employees such as train dispatchers, mechanical employees (who maintain railcars and locomotives) and engineering employees (who maintain track) also have comprehensive training new hire and recurrent training programs.

Safety Programs

Railroads have established safety programs at all levels of the organization beginning with labor and management programs at the local level. Examples include safety committees, audit programs (including participation by rank and file employees), peer observations, newsletters and safety reporting hotlines. Such programs identify and address local hazards and include mechanisms to track the progress of corrections. Railroads have many health and wellness programs beyond normal health care benefits including on site health facilities or off site memberships, smoking cessation programs, weight loss programs and disease management such as sleep disorder screening.

Accidents associated with trespassers and highway-rail crossings are the largest source of casualties and railroads are vigorous supporters of programs such as *Operation Lifesaver* that use managers and employees to reach out to the public. Railroads work with communities to close redundant crossings and participate in collaborate efforts with local law enforcement.

Railroads are extensive users of data to manage safety programs and to focus the intelligent use of resources. Railroad supervisors are held accountable for the safety of their department and their own performance reflects how well they do.

Railroads are subject to rigorous federal reporting requirements for employee injuries and for accidents. For example, any injury beyond one requiring minor "first aid" or any incident resulting in $8,200 or more of railroad damage must be reported. Railroads are required to have comprehensive internal control plans that include, among other things, internal audits and a published whistleblower protection plan. To ensure compliance, FRA regularly audits railroad reporting programs.

Safety-sensitive employees (train crews, signalmen and dispatchers) are subject to various federal alcohol and drug test rules including random tests, post-accident and reasonable suspicion testing.

BEFORE THE

UNITED STATES HOUSE OF REPRESENTATIVES

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

SUBCOMMITTEE ON RAILROADS, PIPELINES,
AND HAZARDOUS MATERIALS

HEARING ON

REAUTHORIZATION OF THE FEDERAL RAIL SAFETY PROGRAM

JANUARY 31, 2007

TESTIMONY OF

EDWARD W. RODZWICZ, PRESIDENT
TEAMSTERS RAIL CONFERENCE

United States House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines, and Hazardous Materials
Hearing on Reauthorization of the Federal Rail Safety Program
Testimony of Teamster Rail Conference President Edward W. Rodzwicz

Thank you and good afternoon Madame Chairwoman, Mr. Ranking Member, and Members of the Subcommittee. My name is Ed Rodzwicz, and I am the President of the Teamsters Rail Conference.

On behalf of the Conference — and more than 70,000 men and women we represent — I want to thank the Committee for holding today's hearing and for providing us with the opportunity to present you with our views on reauthorization of the federal rail safety program.

The federal rail safety program is of vital concern to our members, who place their lives on the line every day in order to transport the people and the goods that keep our economy running. The commitment to safety of the Rail Conference constituent divisions — the Brotherhood of Locomotive Engineers and Trainmen and the Brotherhood of Maintenance of Way Employes Division — is second to none. Sadly, however, within the last six months, seven roadway workers have been killed in the line of duty. That result is unacceptable to the Rail Conference and I challenge the FRA and the industry to move forward immediately and decisively to correct the causes of those tragic deaths.

The BLET and BMWED both are proud members of the FRA's Railroad Safety Advisory Committee and have served since RSAC's inception over a decade ago. We believe that, with some significant exceptions I will mention later, forward strides have been taken in improving railroad industry safety because of consensus-based rulemaking under the RSAC process, and — although we don't always agree with them in the end — we appreciate the respect and consideration we receive from our AAR and Short Line RSAC partners.

The Rail Conference also is proud of its relationship with the FRA. Joe Boardman has been an outstanding Administrator and excellent leader. And we also want to recognize Associate Administrator Jo Strang for her innovative approaches to safety and strong motivational skills.

Under FRA's leadership in the RSAC process, we continue to work on numerous safety-related subjects, from passenger safety to next-generation technology to medical standards for safety-critical workers, and I am confident that safety in the industry will continue to improve. Of course, consensus among stakeholders is not always possible and, in such cases, we encourage FRA to always err on the side of caution and keep safety ahead of all other competing considerations. The unions of the Teamsters Rail Conference look forward to continuing our efforts in working with the FRA and all stakeholders to improve the safety of railroad operations through the RSAC process and all other available means. We believe FRA's performance strongly warrants a multi-year reauthorization of the federal rail safety program, so that we can proceed in an orderly fashion in the years ahead.

As you may know, Madame Chairwoman, accidents and injuries related to human error and other human factors continue to be one of the most serious concerns confronting us. A number of responsive approaches are being considered, including: "federalizing" certain operating procedures; expanding FRA's enforcement power by broadening the categories for which a civil penalty can be imposed upon individual workers; and identifying and implementing ways to collect and analyze accident precursor and other "close call" data as a proactive means of accident prevention.

The BLET was a founding participant in the Confidential Close Calls Reporting System Demonstration Project, and serves on the C^3RS National Steering Committee. This project is a joint FRA/labor/management effort to gather data on close calls, and is similar to a pair of programs that have served the aviation industry well for about 30 years. The first pilot begins operation tomorrow on the Union Pacific Railroad in North Platte, Nebraska, and we hope it becomes a powerful tool for improving safety.

Another initiative in which we're involved — along with the UTU — is a behavior-based accident prevention pilot project developed by FRA for UP's San Antonio Service Unit called Changing At-risk Behavior, or "CAB." CAB provides a system for gathering data on "close call" type behaviors outside of normal discovery channels, and the analysis of the data is used to adjust behaviors, procedures and practices to eliminate potential accident factors. A presentation on the program was very well received at the recent Annual Meeting of the Transportation Research Board.

Unfortunately, as C^3RS was in development and CAB was in a key phase, UP decided to revise its disciplinary policy by substantially increasing the length of suspensions for a number of operating rule violations. The reaction of our BLET General Chairman was to suspend participation in a variety of safety-related programs in protest. However, the unique nature of these two programs — and FRA's strong support for and leadership of them — led us not to abandon C^3RS and CAB, and we believe they will continue to be productive.

Thus, we believe that the most promising approach is one that does not focus solely on the person who is closest in place and time to an accident. Rather, comprehensive accident prevention and safety enhancement must also include continuing study of and adjustment to the work environment as a whole. Accordingly, we believe the federal rail safety program needs to address a number of issues to complete the circle, and I will briefly touch on some of them in no particular order of significance.

The employee protections provided in 49 U.S.C. 20109 need to be updated for two reasons. One relates to the general expansion of individual liability under FRA regulations. And, in this post-911 world — in light of duties and obligations that the Transportation Security Administration and Pipeline and Hazardous Materials Administration have proposed — the other involves a potential need to communicate general safety and security concerns. We are presently working on a specific proposal to address this issue.

The second area is fatigue, which the National Transportation Safety Board identified as the probable cause of the June 28, 2004 accident in Macdona, Texas that killed three, injured 29, and caused a chlorine gas release and $5.7 million in damages. At a minimum, we need to address fatigue by (1) counting "limbo time" as hours of service; (2) requiring a 10-hour calling time for operating crews, so crewmembers have an adequate opportunity to rest before reporting for work; and (3) now that the FRA's has validated a version of the military's "Hursh model" as a tool that can relate fatigue and accident risk, implementing other appropriate, basic fatigue countermeasures. These basic countermeasures can be supplemented as long-term study of fatigue continues.

Like operating crafts, maintenance of way forces are also affected by fatigue. However, the causes of maintenance of way employee fatigue — or MW fatigue — and the solution to the problem for MW employees is very different than the causes and solutions for operating craft employees. In the Maintenance of Way craft, fatigue is most often caused by long commutes, inadequate overnight lodging, and lack of manpower.

The extremely long commutes for MW employees are a direct result of rules sought by the railroads before Presidential Emergency Board No. 219 in 1991. PEB-219 essentially removed contractual territorial limits for many MW employees engaged in programmed production maintenance work such as rail and tie replacement. As a result, approximately 25-30 percent of MW employees are required to travel the entire railroad system to work and an additional 20-25 percent are working away from home in other traveling gangs that cover smaller distances.

For example, a member employed on a UP System Production Crew is required to report for assignments anywhere on the 32,000+ route mile system encompassing 23 states and covering two-thirds of the territory of the United States from New Orleans to Los Angeles and from Los Angeles to Portland or Chicago. The same holds true for all the other major freight railroads. System Production Crews must travel the entire railroad system to work.

As a result, at the beginning of the work period, these workers are forced to travel on their scheduled days off, their "rest days, " in order to reach a job location which is usually hundreds, and often times over 1,000, miles from home. These excessive commutes have been independently documented in a December 2006 FRA-sponsored report (DOT/FRA/ORD-06/25) conducted by Foster-Miller.

The methodology for this study was a survey of a random sample of working MW employees who completed a background survey and kept a daily log over a 2-week period. The published report includes employee comments on fatigue related matters such as travel, sleep location, etc. A small sampling of these published comments are reproduced below:

Travel

"It was a typical Monday after traveling. It was 9 hours to the motel and between that and getting up between 2-3 a.m. I am very tired. On this job we are working early Monday hours because that is the only time that we can get the track."

"It seems Monday's I am usually more tired than any other day of the week. It takes me 8 hours to drive from home to my lodging motel."

"I left home at 0400. How do you expect me to keep my family together? My mother is also in the hospital. Drove 900 miles just to get to work."

"My drive home was 1,000 miles which is a 14 hour drive."

Sleep Location

"I have difficulty sleeping at times due to noise in the motel."

"Did not sleep good at camp (car). There were passing trains that work me up 2 times. And a co-worker woke up and opened the door and it woke me up."

"Employees opening and closing the camp (car) door as they come in. Employees snoring very loudly after being out late."

The Teamsters Rail Conference believes that the solution to these excessive fatigue-inducing conditions is to reinstate some reasonable limits on the size of the territory these workers have to cover. It is simply unreasonable to expect people to commute in excess of 8-14 hours and be alert and attentive upon arrival. Couple the long commutes with noisy double occupancy lodging, or even worse, 8-10 persons lodged together in a decrepit and unclean camp car, it is little wonder why we have fatigue-related safety issues in the MW craft. Smaller territories, better overnight lodging with single occupancy, and the elimination of camp cars are the keys to reducing fatigue and improving safety for MW employees and railroad operations.

We further believe that MW fatigue also is — to some degree — a function of staffing levels. Railroads are not hiring and retaining a sufficient number of employees to adequately maintain the nation's rail infrastructure. There has been a precipitous drop in BMWED staffing levels over the past 25 years. For example, BMWED's average monthly active (i.e., working at the craft) membership in 1981 was 90,610 members. Average monthly active membership fell to 50,795 by 1991 and stands at 30,579 today. This represents a manpower decrease of approximately 66% in just 25 years. While some of this decrease can be attributed to improved technology and greater worker productivity, the fact remains that existing track force levels are insufficient for the task at hand.

There also is a safety aspect to chronic understaffing. It takes appropriate staffing levels and quality training to keep the nation's rail infrastructure properly inspected and maintained,

especially in light of the record ton-miles of freight being transported on the railroads. The BMWED has lost a significant number of members over the past several decades due to retirements, injuries, and other natural attrition. As a result, BMWED members are working longer hours, shorthanded, and their complaints about insufficient manpower continue to fall on deaf ears.

This lack of manpower causes the nation's rail infrastructure to be maintained in a reactive, rather than a proactive mode. Track caused derailments account for approximately one-third of all rail accidents, and this trend will continue to increase until manpower in the maintenance of way department is brought into line with the track miles employees are expected to inspect and repair. Railroad safety is largely dependent on proper track maintenance, and today's high volume, heavy tonnage trains require increased, rather than decreased, track maintenance. Thus, rail safety requires sufficient manpower in maintenance of way track forces to properly and proactively address current track deficiencies and reduce derailments on our nation's rail infrastructure.

While I'm on the subject of staffing and safety, I want to reiterate something you've heard from the Rail Conference and from our Divisions in the past. We fully support the development and deployment of positive train control. PTC as a safety overlay on top of existing signal and train control systems can provide each and every Rail Conference member with an important added margin of personal safety. However, we oppose implementation of PTC as a means of reducing crew size, because trading a set of known risks for a set of unknown risks will jeopardize public safety and the safety of our members.

Increased individual worker liability and the testing and implementation of a number of next-generation technologies also mean that training standards need to be improved. The two newest FRA regulations that include training components — Part 240, governing certification of locomotive engineers, and Subpart H of Part 236, governing processor-based signal and train control systems — prescribe substantially superior training standards than those contained in older FRA regulations. Second-class training is insufficient if first-class performance is going to be expected and demanded of railroad workers. I also want the Subcommittee to know that the Rail Conference fully supports Mr. Wytkind's statements concerning certification of carmen, conductors, mechanics, and signalmen, as well as with respect to staffing, training and certification for hazardous materials movements.

In addition to the numerous studies currently being undertaken by FRA, which we support, we believe several other studies are warranted. These include: maintenance of way staffing levels; the safety impact of drivers of railroad crews to and from duty assignments; an evaluation of conflicting and confusing railroad operating rules; follow-up studies of the Switching Operations Fatalities Analysis Working Group, or SOFA, and of the Collision Analysis Working Group. We also believe there should be a study of the locomotive cab environment and its impact on human performance. Moreover, the FRA should reopen its investigation and study regarding the discharge of human waste along the tracks where maintenance of way workers perform their tasks, which is a subject I address in detail a bit later.

Suffice it to say for now that I simply cannot believe that — in the 21st Century — railroads use on-board toilets that dump human waste on the tracks where our members work.

Just as the industry finds its capacity stretched to the maximum by transportation market demands, so too is the cadre of FRA safety inspectors stretched to the maximum. With capacity scheduled for expansion, and with several next-generation technologies now in development and in the early stages of testing and implementation, FRA cannot be expected to maintain an adequate level of oversight at current staffing levels. We strongly support reauthorization that includes a provision for adding several hundred additional railroad safety inspectors.

We also believe that reauthorization should address the ongoing problem concerning main track switches in "dark territory" — routes on which there is no signal system. A misaligned main track switch in dark territory led to the January 6, 2005 catastrophe in Graniteville, South Carolina, in which BLET member and officer Chris Seeling and eight others were killed, and over 550 were injured because of a chlorine gas release. Another misaligned main track switch in dark territory was involved in the September 15, 2005 collision in Shepherd, Texas, that took the life of BLET member and officer Gary Bailey.

This is one area where we don't believe FRA has gone far enough. Thus far, the focus has been on changing the behavior of railroad workers who throw switches, and includes the potential for individual liability for a civil penalty. However, off-the-shelf switch position detection technology that would eliminate this risk altogether has been available for some time. In fact, this technology will have to be installed on any dark territory route in order for a railroad to implement a positive train control system. We don't believe railroads should be permitted to wait that long to implement a safeguard that is sitting gathering dust.

In its report on the Graniteville accident, the NTSB made two specific recommendations — R-05-14 and R-05-15 — that address main track switches in dark territory: installing an automatically activated device, independent of the switch banner, that will, visually or electronically, compellingly capture the attention of employees involved with switch operations and clearly convey the status of the switch both in daylight and in darkness; and requiring railroads, in non-signaled territory and in the absence of switch position indicator lights or other automated systems that provide train crews with advance notice of switch positions, to operate those trains at speeds that will allow them to be safely stopped in advance of misaligned switches. We believe these recommendations should become mandatory requirements. I also want to mention here that we have an excellent relationship with the NTSB and to congratulate Chairman Mark Rosenker for working with us on issues of mutual concern.

Decades ago, because there were no proper lodging facilities, all railroads were compelled to provide sleeping facilities and food for their road gangs that traveled through the deep, remote rural countryside taking care of the track maintenance for the railroad, replacing the railroad ties and worn rails, maintaining the bridges, trestles, crossings, and other portions of the infrastructure. Because they were in remote locations, these road gangs were housed in old rail cars, often converted box cars, called "camp cars" that were outfitted with sleeping bunks,

sometimes showers, and sometimes toilets, although often the toilet was simply an outhouse placed some distance from the camp car.

Over time, as clean and affordable lodging became readily available in virtually all sections of the country, all but one of the rail carriers abandoned the camp cars because lodging employees in hotels or providing them with a cash per diem payment was both economical and the "right thing to do" to treat their workers better than before. However, Norfolk Southern continues to use these camp cars despite the fact that there are decent lodging facilities available nearby at reasonable rates.

The Norfolk Southern camp cars the workers return to at the end of an exhausting and punishing day are small, cramped facilities — measuring ten feet by forty feet — that must be shared by up to eight grown men. The men sleep in small bunk beds, smaller than a twin sized mattress, much like one would find today in a summer camp for children. The men generally sleep four on each end of the camp car, with sinks and showers in the middle. The water in most camps cars is non-potable, meaning it is not fit for drinking, but it is the only water available for brushing their teeth, washing their face and showering.

The camp cars provide the eight men with 400 square feet of living space — 50 square feet each — but given most of the room is taken up with the bunk beds, showers, sinks, hot water heater and lockers, there ends up to be less than 20 square feet per person. This is less space than in a death row prison cell in Florida, where each death row inmate has 54 square feet of living space and an indoor toilet. BMWE workers living in NS camp cars have to walk outside, through the elements — whether it be rain, snow, sleet, or hail — to use an often dark and dirty outhouse or porta-john.

The beds are small — measuring 2'8" x 6' — meaning if a worker wants to roll over, he or she has to roll over in place or otherwise "roll" out of bed and onto the floor. And if they are over 6 feet tall, as many maintenance of way workers are, they have to sleep with their knees bent or their feet hanging out over the edge of the bed.

Going back to the camp cars after a grueling day's work, a worker has to compete with seven other workers for shower time, eat in the camp's often unsanitary dinning car and then attempt to get a restful night's sleep in a crowded camp car with seven other workers, next to an operating train track where mile-long freight trains roar by regularly throughout the night, sounding their horn and shaking the camp car as it passes. It makes for fitful night's rest under the best of circumstances.

Many of the camp cars are old and dilapidated, but even in the cleanest, newest camp car it is an inhuman way to live. With eight men living in such cramped quarters, the camp cars are virtually impossible to keep clean and personal privacy simply does not exist.

According to supervisors we've talked to, Norfolk Southern continues to use the camp cars because it gives them greater control over their work force. It is clear that for Norfolk

Southern management these camp cars are a means of controlling their workforce and keeping it where they need it, when they need it — not unlike the plantations in the dark days of slavery.

These substandard living conditions have no place in our society. Even at its best, camp cars are an inhumane way for an American worker to live. Even in the best of conditions, there is no way the camp cars crammed with eight workers can provide the privacy or the cleanliness for humane living conditions. The MW worker sleeps on the same grimy, filthy sheets week after week, steps into the same dirty shower day after day, and trudges through mud soaked with "gray water" to an outhouse every night and every morning.

Therefore, basic human comfort and sanitation for maintenance of way workers also should be addressed, including the elimination of camp cars used to house BMWED members on the Norfolk Southern, and the discharge on the right of way of effluent from railroad conveyances. The life of a railroader on the maintenance of way road crew is a brutal one. The labor is grueling and physically demanding. It is all outdoors and the workers toil in all forms of weather, rain, snow, and excessive heat. At the end of the day, the workers are exhausted. What they want and need is a place to clean up, a place to eat a nourishing meal and a clean, quiet, and comfortable place in which to sleep. Presently, maintenance of way workers are the only rail workers required to use multi-person lodging facilities to obtain proper rest. Operating craft employees obtain rest in single occupancy lodging and maintenance of way workers should be treated no differently.

In 1988, the FRA issued "Guidelines for Clean, Safe, and Sanitary Railroad Provided Camp Cars" as Appendix C to 49 CFR Part 228. These guidelines are not enforceable regulations and, therefore, have no teeth. While FRA will respond to complaints, their enforcement is basically reduced to making recommendations and facilitating quick fixes. Furthermore, the FRA guidelines do not provide FRA with authority to require such essentials as potable water for washing persons, eating surfaces and utensils. The discharge of "gray water" from sinks and showers onto the ground is also not prohibited by FRA Guidelines.

To address these health issues, the union must often try to find a sympathetic city, county or state health department to conduct an inspection and force compliance with city, county or state public health ordinances. Many times these agencies are denied access and jurisdiction. And in the rare instances where jurisdiction is rightfully claimed by a local agency, the NS simply moves the cars to another location outside the jurisdiction in order to evade local health authorities and enforcement of local ordinances and law.

Camp cars are a health hazard and a blight which must be once and for all eliminated. The union has repeatedly requested NS to abandon camp cars and place workers in hotels like every other rail carrier in the U.S. However, they have refused to do so and expect the union to give one of the most profitable railroads in the country concessions in exchange for treating their workers humanely when every other railroad that has abandoned camp cars actually has saved money by doing so. We have reached the conclusion that an Act of Congress may be the only means of compelling NS to abandon this inhuman practice once and for all.

Equally abhorrent for our BMWED membership is their exposure to effluent discharge from railroad conveyances. On April 4, 2002, the FRA issued a Final Rule in the Locomotive Cab Sanitation proceeding which included provisions to permit discharge of toilet effluent from locomotives onto the railroad right-of-way. *See* 67 FR 16032–16052. We believe that the discharge of untreated or partially treated human waste onto the railroad right-of-way poses a significant health and safety risk to roadway workers and the general public, and adversely impacts the environment through the introduction of contaminants into surface and ground water resources.

Today, this discharge is not being monitored for contaminants or compliance with applicable law. Stakeholders in the process, including the BMWED and the Brotherhood of Railroad Signalmen, filed extensive comments and participated in public hearings to present evidence and voice opposition to provisions of the rule which permit the unmonitored discharge along the railroad right-of-way of potential disease carrying organisms including, but not limited to, total coliform, fecal coliform, and fecal streptococci.

In May 2002, the BMWED filed a Petition for Reconsideration before the FRA. BMWED's petition cited the following deficiencies in the final rule as the basis for its Petition:

1. The Final Rule did not address our valid and verified concerns regarding the potential health consequences of worker exposure to untreated or partially treated effluent discharged from on-board "biological waste treatment systems" such as the Microphor™ toilet.

2. The Final Rule did not incorporate effective safeguards and periodic monitoring of effluent to assure that such systems "perform as intended," i.e., consistently meet the discharge requirements of 0 colonies/100 ml total coliform, 0 colonies/100ml fecal coliform, and 0 colonies/100 ml fecal streptococci under real operating conditions.

3. The Final Rule is devoid of effective provisions to reasonably assure waste disposal methods from locomotive conveyances meet or exceed the current requirements of the Environmental Protection Agency, the Food and Drug Administration (FDA), or the Occupational Safety and Health Administration Standard found at 29 CFR § 1910.141(c)(iii), which states that "the sewage disposal method shall not endanger the health of employees."

We and other affected rail labor organizations contended that the Microphor™ system used in locomotives (and in some passenger cars) has the potential to discharge untreated or partially treated wastes along the right of way under a number of operational and maintenance conditions. Based upon this contention, the Association of American Railroads (AAR) agreed in August 2001 to conduct testing of effluent from Microphor™ systems under a variety of operational conditions. The initial testing indicated that "some units performed as intended, but some apparently do not." 67 FR 16035. According to AAR, "the testing results revealed

inconsistencies in the operation of the Microphor system, which may be due to design changes, maintenance, usage, or other factors." Id.

As noted by FRA "[i]t is widely known that exposure to human fecal matter or untreated sewage waste can lead to diarrheal diseases such as amebiasis, giardiasis, shigellosis and salmonellosis, and viral diseases such as hepatitis." 66 FR 137 (Jan. 2, 2001). FRA further acknowledged that "transmission of these illnesses can occur through physical contact with waste," and that "disease transmission may occur through hand-to-mouth ingestion after physical contact with an infected source." Id.

By letter dated July 6, 2006, FRA denied our Petition for Reconsideration. In denying the petition, FRA stated "[t]he FDA representatives noted that even if a bacteria or virus survives the treatment process, a worker would need to have direct contact with the untreated waste product through touch or aerolization within a short time after discharge for any contamination to occur. Any potential health risk created by the use of Microphor™ toilet systems is minimal." BMWED members and others working along the railroad right of way do, in fact, have the daily potential to come in direct contact with the discharge through touch or aerolization and are often sprayed with discharged liquids as trains pass.

Since the issuance of the Final Rule, FRA has conducted some field tests with the assistance of a private laboratory to determine whether Microphor™ toilet systems properly treat effluent before discharging it onto railroad track beds. FRA acknowledged in their denial letter that "Microphor toilet systems that were in a near empty state, that is, they required a significant number of flushes to cause an effluent to discharge, or where the chlorination system was not properly charged, or both, resulted in effluent that did contain significant levels of pathogens. However, when sampled over time even these levels diminished significantly as the contact with the disinfectant chlorine had its desired effect."

BMWED members routinely eat their lunch along the right-of-way and are seldom afforded access to potable water and antibacterial soap for washing prior to lunch or when otherwise necessary. As such, the Rail Conference reiterates and underscores BMWED's strongly held belief that no on-board toilet facility wastes should be discharged along the railroad right-of-way. If discharge is to be allowed from locomotives and passenger cars, safeguards must be adopted to protect the health of roadway workers, the environment, and the public at large.

We believe a prohibition against discharge of toilet waste from railroad conveyances is the most effective means to address this issue. However, short of a regulatory or statutory prohibition against right-of-way discharge, we believe that, in order to protect employees, the public, and the environment from exposure to untreated or partially treated human wastes, laws governing such discharge should, at minimum, be amended to require:

1. railroad conveyances, including locomotives and passenger cars, shall be prohibited from discharging live organisms along the railroad right-of-way;

2. maintenance of on-board toilet facilities shall be in accordance with the manufacturer's recommended maintenance procedures; and

3. FRA shall conduct random sampling of discharged effluent for live organisms, including but not limited to, total coliform, fecal coliform, and fecal streptococci, from 10% of the equipped locomotive and passenger fleet annually.

These requirements are intended to provide ongoing verification to assure these systems "perform as intended" (i.e., consistently discharge effluent free of live organisms at the instant of discharge). Absent a regulatory prohibition against right-of-way discharge, it remains absolutely imperative to the safety and health of roadway workers and the protection of the environment that FRA and/or FDA prohibit discharge of live organisms and establish maintenance, inspection, and testing requirements for railroad conveyances. Such is the only verifiable means to assure that no viable (live) organisms are present in the effluent at the instant of discharge into the environment. This is a reasonable, performance-based approach that will allow continued use of these systems while providing ongoing data monitoring to assure such systems "operate as intended" and do not pose a health risk to roadway workers and the public along the railroad right-of-way, or cause environmental contamination of our nation's surface and ground water resources.

The Teamsters Rail Conference also is concerned about the high number of accidents at public and private grade crossings. In 2005, there were 3,041 accidents at grade crossings, resulting in 357 fatalities and 1,010 injuries. Some of these accidents were the result of highway users ignoring or circumventing active warning devices at grade crossings. Thus, an emphasis on public awareness, education, and enforcement should be continued and enhanced, and penalties for ignoring or circumventing active warning devices at grade crossings should be significantly increased.

The use of roadside cameras and other available technology to identify and punish highway users who circumvent grade crossing protection gates should also be expanded. Uniform and highly visible signage at grade crossings, and advance signage on the approach to grade crossings, should be mandatory. Finally, laws should be adopted governing the control of brush and vegetation near grade crossings, including the establishment of minimum line-of-sight distances based upon the maximum authorized speed of trains, to make train traffic more visible to the highway user. At crossings where such line-of-sight minimums can not be met due to curvature or other physical conditions, active warning devises (i.e., lights and gates) should be mandatory.

Before closing I want to return to the subject, once again, of human factor caused accidents. It is important to for the Subcommittee to understand that accident reporting is solely the responsibility of the regulated railroad community. The accident data compiled by FRA is dependent upon what, how, when, and if the information is reported by the industry itself. Under the current regulatory scheme, the railroad reporting an accident or injury determines the cause code(s) attributed to that accident or injury, and railroads almost never engage in a full-blown root cause analysis to determine primary, secondary, contributing or upstream causes. This is

somewhat akin to the fox guarding the hen house in our view, because FRA simply does not have the resources to investigate any but a tiny percentage of reported accidents and injuries.

We believe a significant number of reported accidents attributed to human error or other human factors are partly the result of such self-reporting and coding. Why would a railroad implicate itself by coding mechanical, track, or signal defects when it can easily "blame the worker," which is far more convenient. Over time, this has led to FRA enforcement increasingly shifting from penalizing railroads to penalizing individual workers. To address this situation, the Teamsters Rail Conference supports and urges increased funding for FRA, which should be dedicated toward investigating more accidents and verifying proper coding of accident causes.

Once again, I thank the Subcommittee for hearing us today, and I'm happy to try to answer any questions you may have.

Statement of Richard F. Timmons, President

American Short Line and Regional Railroad Association

Before the

U.S. House of Representatives

Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines and Hazardous Materials

January 31, 2007

Richard F. Timmons
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I appreciate the opportunity to appear this morning on behalf of the American Short Line and Regional Railroad Association (ASLRRA). Nationwide there are over 500 short line railroads operating nearly 50,000 miles of track and employing over 23,000 individuals. Twenty five of the 30 Members of this subcommittee have one or more short line railroads operating in their district.

As has been said many times this afternoon there is nothing more important to the success of railroading than safety. For short lines it is not only good business but it is personal. We are small companies where every individual is well known to the other.

Mr. Hamberger recited the considerable improvement in the railroad industry safety data and I am pleased to say the short line industry has contributed to that improvement. According to FRA data in the five year period 2001 to 2005 the short line industry's total number of injuries has declined by 26% and through October of 2006 by 40%.

In the brief time I have let me make three points.

First, as this is a hearing concerning the reauthorization of the Federal Rail Safety Program, I should start by saying that short line railroads are generally very satisfied with the operation of the Federal Rail Safety Program. We believe the law itself and the administration of that law by the Federal Railroad Administration has made a significant contribution to the safety of the industry. Having said that, we do disagree with the FRA's proposed revisions to the schedule of civil penalties which will approximately double fines for safety violations. We have submitted comments on this subject to the FRA and I will not repeat those here other than to say that we believe the agency should adopt a sliding scale of penalties based on track classification. Our railroads operate at much lower speeds and much lower densities and thus have a much lower accident severity risk than the Class I railroads.

Second, we believe that the most important thing a short line railroad can do to improve safety is to improve its track. As you know the short line industry inherited the worst of the nation's track infrastructure when we began taking over these properties in the 1980's. Today short lines low almost a third of their annual revenues back into infrastructure improvements. That is more than any other industry in the country. Beginning in 2005 we have been able to increase that investment thanks to the rehabilitation tax credit that so many of you were helpful in securing. As our track improves, our safety record will improve and we think the statistics I mentioned bear that out. Our three year tax credit expires at the end of 2007 and we are seeking a three year extension of the credit. Twenty four of the 30 Members of this subcommittee were co-sponsors of our original tax credit legislation and we hope you will do so again. Of the remaining six, five are new Members and did not have an opportunity to co-sponsor and we hope they will consider doing so this time.

Third, I would like to briefly address the issue hazardous material. Almost to a company we would prefer to give up this traffic. We cannot adequately insure for the risk and for most short lines a single accident means going out of business. In the majority of cases

the short line does not even set the rate so there is virtually no relationship between what we earn and the risk we assume. Compounding the rate inadequacy problem is the fact that for short lines the cost to insure one car is just a much as 100 cars.

I fully understand how difficult this issue is for Congress. There is strong special interest opposition to a meaningful cap on liability. Neither the producers nor the end-users are willing to pay the real price associated with this transportation and would vigorously and probably successfully oppose any such proposal in Congress. But the fact remains that some day there will be an accident on a short line railroad and that railroad will be put out of business. When that happens many more short line railroad owners will decide the risk is too great and will throw in the towel.

We believe that a realistic solution to this problem will involve some combination of a limit on liability, a greater assumption of the cost by the producers and end-users and perhaps some kind of government insurance program that assumes the risk above a certain level. As Mr. Hamberger has suggested some type of Price-Anderson mechanism may be the most reasonable solution. For that to work for short lines however there needs to be some kind of bridge between our company insurance and what will undoubtedly be a much higher liability limit under the new mechanism.

I strongly urge this Committee to vigorously pursue a solution before not after a crisis occurs. The short line industry certainly stands ready to make whatever modest contribution we can to crafting that solution.

I appreciate the opportunity to appear here today and would be pleased to answer any questions you might have.

Questions for the Record
General Timmons

This email is in response to a February 26, 2007 request from Chairwoman Corrine Brown, Subcommittee on Railroads, Pipelines, and Hazardous Materials, concerning "Questions for the Record" related to my testimony on January 31, 2007 at a hearing on "Reauthorization of the Federal Rail Safety Program."

The Union Pacific Railroad Company has been replacing track in 1.5 mile segments along the Alameda Corridor East in Los Angeles County. This has closed multiple Grade crossings for 4-5 days. The city of Industry and Los Angeles County emergency service officials have said that the initial track work was costing them $50,000 in order to create Emergency Service Centers along the railroad. These centers allow emergency service providers to serve communities that may be cut off from emergency services due to the grade crossing closures. Multiple cities in East Los Angeles have claimed that the railroad company has not given them enough time to prepare for the closures.

Question 1. a.
When railroad companies close down multiple grade crossings for track work, it forces cities to provide additional emergency services in order to have acces on both sides of the track for emergencies. How do railroad companies repay em rgency service agencies for this added service?

Answer:

Class 2 and Class 3 railroads rarely if ever are faced with a situation that requires closing multiple grade crossings at the same time. To do so would be a very unique situation because small railroads do not generally have multiple crossings repair requirements in the small towns in which they operate. In nearly every instance where grade crossing repairs and upgrades are concerned the small railroad and or the contractor for the project make application to the appropriate state agency and then are permitted to coordinate with local authorities and police to develop a workable plan that permits emergency services access in a timely manner. As a result, the requirement to reimburse local EMS organizations is unnecessary.

Question 1. b.
Are railroad companies required to provide cities and communities with notice of when railroad crossings are going to be closed due to track work?

Answer:
The requirements for notification of grade crossing closure are usually specified by state Departments of Transportation, state Public Utilities Commissions or local governments and vary according to the rules and procedures each state believes meet the needs of their individual circumstances. Generally railroads file an application to one of the state agencies referenced above to work on grade crossings. This initiates the process of coordination with community officials concerning the details of the work to be done with the resulting EMS, detours, hazard markings and barriers arrangements finalized prior to the work phase of the project.

Qu stion 2.
One of my biggest concerns is regarding the life of rail.

a. How do railroad companies determine when it is time to replace tracks?

Answer:
Replacing rail is based on a number of factors. Very precise specifications for railroad track-head, web, base and hardness are routinely evaluated by track inspectors and any deviation from the mandatory specifications requires grinding, welding, alignment or replacement. Additionally, other rail deformities that are visible such as serious kinks, chips, cracks, friction depressions, weld failure, joint bar cracks and others all require immediate repair or replacement. The evaluation of rail and track bed is a continuous process prescribed by the Federal Railroad Administration. Track is visually inspected by high-rail track inspectors weekly or monthly depending on the tonnage that the rail is exposed to. They are looking for visible signs of rail, switch, frog, diamond, joints, joint bar cracks or out of tolerance conditions that will require repair or replacement. Track Geometry cars assess the track alignment and road bed using electro-mechanical sensors. Sperry cars use ultrasonic equipment to detect rail flaws and high speed cameras to evaluate rail condition and cracks. And, grinding equipment is used to insure rail head contour is within the tolerances for rail-wheel interface. The most significant factors influencing rail replacement are the ton miles the rail is subjected to each year. The greater the tonnage the more stress and wear the rail experiences and the more likely it is to be replaced. Additionally, the correct functioning of the car trucks and the condition of the wheels (worn and out of round) plays a significant role in the damage to and wear of rail and the ultimate repair or replacement of track.

b. Have there been any issues regarding the type of steel used in laying new rail?

An wer:

Rail metallurgy is a never ending aspect of railroading and has been since the beginning of the rail industry 175 years ago. Steel used in rails today is consistently of high quality and provides a reliable, durable and safe track upon which trains operate. The Transportation Technology Center, Inc. (TTCI) in Pueblo, CO, the premier railroad research and development facility in the world operates a continuous loop-track testing various rail manufacturers' products and provides feedback to those companies concerning technical results and performance. Some rail performs better than others due to special treatments such as head-hardening or steel tempering processes applied during the manufacturing stages of rail production.

c. What research and development has been done to prevent cracks in insulated joint bars?

Answer:

Insulated joint bars have been subjected to extensive evaluations under the most demanding and trying loads and environments at the TTCI. An on-going insulated joint bar project at this facility continues to examine the steel, ceramic, glued joint interface of the insulated joint bar for modifications and improvements. Moreover, manufacturers engage in their own testing to meet the rigorous standards specified by the railroad companies and many have their products evaluated at the TTCI test facility. The Class 2 and Class 3 railroads are the beneficiaries of this costly and technically advanced work.

3. Question:

How are railroad companies working with cities and states to support th construction of grade separation projects?

Answer:

Class 2 and Class 3 railroads are engaged with state Metropolitan Planning Organizations (MPO) or Local Development Districts (LDD). These are planning and technical review boards required by the federal government in order for a state to receive federal funding assistance. These organizations in concert with state DOT's attempt to prioritize grade crossing and separation projects in their states so that the funding that is available is applied to the most needy crossing sites. The US Department of Transportation (DOT) distributes grade crossing funds to the state DOT's who in turn rely heavily on the MPO's and LDD's for rank ordering of grade separation and crossing projects. This order of merit listing then determines where those grade crossing funds should be spent. This is a collaborative effort between the state DOT's and short lines and final project selection is driven by rail traffic volumes, train frequency, urban and rural settings, school bus passage, motor

vehicle usage, line of sight considerations and other factors that would benefit the community and the railroad from safety and congestion perspectives.

4. Question:
How much have railroad companies invested in the construction of grade separations across the country?

Answer:
This is a statistic that is not reported for Class 2 and Class 3 railroads so I am unable to provide a reliable dollar amount. The overall conclusion however, is that not enough money is available to small railroads to realistically pursue a broad program of grade separations. The extremely high costs of any grade separation make this investment out of reach for small railroads unless state or local funding is provided. We have long believed that the Section 130 Grade Crossing program which provides much of this funding is significantly under funded and that one of the most important things the federal government could do to reduce grade crossing accidents is to provide the Section 130 program a more meaningful share of the federal monies available for surface transportation programs.

5. Question:
a. Is there technology available to inspect joint bar cracks?

Answer:
There currently exists technology that can detect exposed cracks in joint bars using high-rail equipment with very high speed digital cameras. This provides an enlarged visual image of the joint bar for inspectors to examine for cracks or other flaws.

b. Can it detect hairline fractures within joint bars?

Answer:
There is no technology in use today that can penetrate the internal metallurgical structure of the joint bar and identify molecular failures or developing stresses. Ongoing research continues to pursue this type of technology.

c. How is this equipment being used?

Answer:
Standard railroad equipment is used on the railroads that possesses very specialized and sophisticated laser, ultrasonic and photographic equipment that is used to evaluate rail, rail welds and joint bars. Numerous pieces of this equipment are in constant demand and travel the rail systems evaluating and reporting findings to senior engineers in each railroad. The Class 2 and Class 3 railroads frequently capitalize on the Class 1 equipment to assess their own rail networks or contract for this equipment.

Statement of Sharon L. Van Dyck

On Behalf of the

American Association for Justice (AAJ)

before the
House Committee on Transportation & Infrastructure
Railroads Subcommittee

January 31, 2007

Madam Chairman and Members of the Subcommittee:

Thank you for the opportunity to appear before you today to discuss the reauthorization of the Federal Railroad Safety Act (FRSA) and the need to clarify that FRSA does not preempt state law remedies.

By way of introduction, my name is Sharon L. Van Dyck. I am a shareholder at the personal injury law firm Schwebel, Goetz & Sieben, P.A. located in Minneapolis, Minnesota. I have spent the last 20 years representing people injured by the negligence of others. I am here today on behalf of the American Association for Justice (AAJ), formerly known as the Association of Trial Lawyers of America (ATLA). AAJ, with 52,000 members in the United States, Canada and abroad, is the world's largest trial bar. It was established in 1946 to safeguard victims' rights, strengthen the civil justice system, promote injury prevention, and foster the disclosure of information critical to public health and safety. I have spent the last seven years advocating for the rights of victims injured due to the negligence of the railroads.

The FRSA was enacted in 1970 to "promote safety in every area of railroad operations and reduce railroad-related accidents and incidents." 49 U.S.C. § 20101. The Congress which enacted this legislation believed that establishing a uniform system of minimum standards that apply across the United States would improve safety for all. In recent years that purpose has been perverted by courts who apply the doctrine of preemption to deprive Americans grievously injured in railroad accidents of any remedy, even when it is undisputed that the cause of the accident was the railroad's failure to live up to those minimum federal standards. Now is the time for Congress to step in and let the courts know that they have misinterpreted Congress' clear intent: that the purpose of the FRSA was and is to set uniform minimum safety standards, and that an expansive application of preemption to deprive accident victims access to state remedies is a misapplication of the law.

The Problem

The problem is dramatically demonstrated by the Minot, North Dakota derailment cases. On January 18, 2002 31 cars from a train owned by Canadian Pacific Railway derailed near the city of Minot, North Dakota. The derailment caused seven cars carrying anhydrous ammonia to breach, releasing over 200,000 gallons of the deadly gas. The gas formed a dense cloud of toxic fumes that engulfed the town and its residents. One man died that night and hundreds of others sustained life-altering injuries. Among the various causes of the derailment was the failure of a so-called temporary joint that had been left in this substandard track for over 20 months. In addition, the track itself was old, worn out and poorly maintained. To the limited extent that federal regulations applied to this derailment, the railroad did not comply with these minimum standards.

Nonetheless in *Mehl v. Canadian Pacific Railway*, 417 F. Supp. 2d 1104 (D.N.D. 2006), the Federal District Court in North Dakota reluctantly dismissed all claims against Canadian Pacific on the basis of federal preemption. Per the *Mehl* court, "neither the United States Supreme Court nor the Eighth Circuit requires railroads to prove compliance with federal

regulations before allowing preemption of state law claims." *Id.* At 1116. Judge Hovland, obviously distressed by what he believes to be the current state of the law, stated:

> "While the Federal Railroad Safety Act does provide for civil penalties to be imposed on non-compliant railroads, the legislation fails to provide any method to make injured parties whole and, in fact, closes every available door and remedy for injured parties. As a result, the judicial system is left with a law that is inherently unfair to innocent bystanders and property owners who may be injured by the negligent actions of railroad companies.
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> * * *
>
> Other federal district courts throughout the country have struggled with the harshness of decisions such as this. However, it is the province of Congress, not the judicial branch, to address this inequity. Common sense and fundamental concepts of fairness and justice demand that there should be a remedy for the wrong, but there is none under the current state of federal law. Such an unfair and inequitable result should be addressed through legislative action."

Mehl, 417 F. Supp. 2d at 1120, 1121.

Two months after the *Mehl* decision was issued in March 2006, the Eighth Circuit held that regulations promulgated by the Federal Railroad Administration (FRA) pursuant to the FRSA on the issue of track inspection form the basis for original federal question jurisdiction despite the fact that the FRSA provides no cause of action or other remedy for those harmed by the failure of a railroad to comply with those regulations. *Lundeen v. Canadian Pacific Ry*, 447 F.3d 606 (8th Cir. 2006).

Shortly thereafter over 200 Minot cases brought in Minnesota state court were removed to Federal court on the basis of *Lundeen*. These cases were removed over two years after they were filed in state court. One had already been tried to verdict but was awaiting resolution of post trial motions. One was in the middle of trial. The trial court had no alternative but to dismiss the jury after two weeks of testimony and transfer the case to federal court. All of these cases are now facing motions to dismiss based upon the *Mehl* rationale: that the preemption clause in the FRSA eliminates all state tort causes of action in any area in which a federal regulation enacted by the FRA pursuant to the FRSA has been promulgated despite the fact that there is no alternative remedy.

This distorted reading of the FRSA preemption clause is not limited to the Minot derailment cases. In *Kalan Enterprises LLC v BNSF Ry*, 415 F. Supp. 2d 977 (D. Minn.), the federal district court dismissed all causes of action against the BNSF railroad arising out of a derailment in Perham, Minnesota, on the basis FRSA preemption. As in the Minot cases, the court expressly rejected the idea that a railroad has to comply with federal regulations promulgated pursuant to the FRSA in order to be entitled to preemption. The mere reference to a federal regulation and allegation that the regulation had been violated was enough to deprive the injured party of any cause of action. The Federal District Court in Massachusetts did the same thing in *Ouelette v. Union Tank Car Co.*, 902 F. Supp. 5 (D. Mass 1995).

This trend effectively confuses preemption with immunity. Preemption is the principle, derived from the Supremacy Clause of the United States Constitution, that a federal law can supersede or supplant any inconsistent state law or regulation. Where preemption occurs, state law on a given subject is invalidated, and the federal law substituted in its place.

In the context of railroad standards, this should mean that where the FRA has promulgated a federal standard to govern a particular area of railroad operations, that standard is a *minimal standard* of adequacy. Any lesser or conflicting state guideline is preempted. Where the FRA has not yet promulgated a federal standard, any pertinent state standard continues in effect. Preemption as used in the context of the FRSA ought not be read to mean that the very existence of the federal standard preempts state law remedies. When the railroad fails to comply with a minimal federal standard, this misinterpretation is even more appalling.

The FRSA is a statute whose sole purpose is to improve railroad safety. To read the FRSA preemption clause in a way that strips accident victims of any remedy for failure to comply with minimum standards is a travesty of justice. It is also bad policy. When no remedy is available to persons who have suffered severe injuries due to the negligence of another, those persons rely on taxpayer-funded programs, such as Medicaid and Social Security disability payments. Such cost-shifting can also have a detrimental impact on private employers as injured persons rely on employer-provided benefits, like health insurance, to help them cope with their injuries. At the same time the injured-party relies on employer-provided benefits, the employee may not be able to perform his or her job duties. Furthermore, when the railroads are not held accountable for their wrongdoing, there is no incentive to maintain and repair the tracks to prevent future accidents from occurring.

The Solution

When Congress enacted the FRSA, it intended to establish a regulatory system that would provide a comprehensive set of minimum standards to which railroads must adhere for the purpose of improving railroad safety uniformly throughout the 50 states. The very structure of the Act's preemption clause as it currently reads supports this interpretation. Preemption is expressly conditioned both on administrative action and on an express exception:

> Law, regulations, and orders related to railroad safety and laws, regulations, and orders related to railroad security shall be nationally uniform to the extent practicable. ***A state may adopt or continue in force a law, regulation, or order related to railroad safety or security until*** the Secretary of Transportation (with respect to railroad safety matters) or the Secretary of Homeland Security (with respect to railroad security matters), prescribes a regulation or issues an order covering the subject matter of the State requirement. ***A State may adopt or continue in force an additional or more stringent law, rule, regulation, order or standard relating to railroad safety when*** it is necessary to eliminate or reduce an essentially local safety or security hazard and when not incompatible with a law, rule regulation, order, or standard, when not creating an undue burden on interstate commerce.

49 U.S.C. § 20106 (emphasis added). As written the preemption clause is bordered by two express savings clauses that "show considerable solicitude for state law." *CSX Transportation, Inc. v. Easterwood*, 507 U.S. 658, 665 (1993). The problems described above demonstrate that courts are overemphasizing the uniformity provision (ignoring the phrase "to the extent practicable), and underemphasizing two savings clauses and the basic premise upon which preemption is based: that there is a presumption against preemption "in the interest of avoiding unintended encroachment on the authority of the States." *Easterwood*, 507 U.S. at 663-64. As noted by Judge Hovland in *Mehl*, Congressional action is needed to send a message to the courts that their analysis of the preemption clause in the FRSA is distorted.

It is inconceivable that Congress would enact a statute for the purpose of improving railroad safety that instead strips persons injured by a railroad's failure to adhere to federal standards of any remedy in a court of law. Nothing in the language of the statute indicates any intent to preempt state common law causes of action, and for over 20 years, the courts did not find such a preemptive intent. What is needed is an amendment to clarify the preemption clause in the FRSA, making it clear that any uniform standards established by the FRA pursuant to the FRSA are ***minimum*** standards. The FRSA does not preempt an otherwise viable state claim alleging a railroad's failure to meet those standards.

Thank you for allowing me to appear before you today. I would be happy to answer any questions.

WRITTEN STATEMENT OF
EDWARD WYTKIND, PRESIDENT
TRANSPORTATION TRADES DEPARTMENT, AFL-CIO

HOUSE SUBCOMMITTEE ON RAILROADS,
PIPELINES, AND HAZARDOUS MATERIALS
ON
REAUTHORIZATION OF THE FEDERAL RAIL SAFETY PROGRAM

January 31, 2007

Chairwoman Brown, Ranking Member Shuster and members of the Subcommittee, let me first thank you for the opportunity to testify this afternoon and to present the views and concerns of transportation workers as you embark on efforts to reauthorize the federal rail safety program. As this Committee knows, the Transportation Trades Department, AFL-CIO (TTD) consists of 32 member unions in all modes of transportation, including those that represent hundreds of thousands of rail workers in the freight, passenger and commuter sectors. There is no question that we have a vested interest in the topic of today's hearing and in fact have joined with you Madam Chair, Chairman Oberstar and other members of this Committee in pursuit of policies that will enhance the safety and security of this critical industry. Yet too often our pleas have been met with stiff resistance from those in industry whose lobbyists have spent a decade or more derailing every attempt to reauthorize federal rail safety programs. On that point, Madam Chair, let me say that we are particularly pleased to see rail safety as the Subcommittee's first hearing on your watch.

It is simply disgraceful that over a decade has passed since our nation's rail safety programs have been reauthorized. Since the last reauthorization bill in 1994, safety problems and issues identified by our members, Members of Congress, the media and local and state government officials have only intensified and the volume of freight, including hazardous materials, is pushing our rail system past capacity. Add to that the security concerns present since the September 11, 2001 attacks on our nation and you have a sector of transportation that is in desperate need of safety reform and oversight.

The association representing our nation's railroads has stated that "railroads and their employees are in the best position to know how to improve safety and reduce the costs of injuries and accidents." We couldn't agree more with the sentiment that employees are critical in this debate. They know first-hand not only what will make their jobs safer, but also more productive. By partnering with its workforce and taking a collaborative approach, the railroads could find ways to make this industry safer, more efficient and more seamless within the entire transportation network. But unfortunately, the same employers who speak of labor-management cooperation when it is convenient reject it in practice.

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Employees are still being intimidated and harassed when it comes to reporting accidents and potential safety and security problems. Strong whistleblower protections must be a staple of any rail safety reauthorization bill. Worker fatigue in this industry is a problem that grows by the hour and allowing railroads to pretend that a tired workforce is an inevitable by-product of moving large volumes of cargo must end. There are simply not enough rail workers in key positions; comprehensive training for new hires is sorely lacking; and recurrent training programs are deficient. We also must ensure that track safety is being advanced, specifically through the elimination of so-called "dark" territory. And when railroads do violate safety rules, enforcement must be swift and fines sufficient to discourage and punish bad behavior.

The railroads' answer to these and other safety needs is to replace safety rules with "performance standards." In effect, the industry wants to set its own goals for safety as well as its own plan for how to meet those goals. Under this scenario, the railroads would jettison established rules and regulations and instead set their own "targets" for safety goals (i.e. a certain injury rate or accidents per set amount of train miles). This approach is absolutely absurd: no Member of Congress should accept a self-imposed industry standard that tolerates a certain rate of injuries and accidents.

Rail workers are already familiar with industry goal-setting and targets. In short, self-policing won't work. Rail workers will be at risk, communities will be threatened and the safe and efficient movement of goods and people will be compromised. Performance standards have their place. They can be an effective motivating tool in industries where there is collaboration between employer and employees and where there are common goals. The rail industry today is no such place. By failing to implement any meaningful safety reforms in addition to refusing to bargain in good faith, management has created an environment with its workforce that is acrimonious and distrustful. It is clear that this is an industry where zeal for a robust bottom line clouds the judgment of those in a position to advance safety reforms.

Reporting

Safety in the railroad industry is measured by the Federal Railroad Administration (FRA) from data collected from accident and incident reports. A significant problem stems from the fact that workers are routinely and soundly discouraged from actually submitting these reports. The data itself is therefore flawed, and everything that relies on that data, such as rules and regulations, penalties and/or fines, are likewise skewed.

Rail workers and their unions continue to face employer harassment and intimidation when reporting accidents, injuries and other safety concerns. After conducting focus group interviews, the FRA itself stated in a report entitled *An Examination of Railroad Yard Workers Safety* (RR02-01), that "perhaps of most significance, rail labor painted a generally adversarial picture of the safety climate in the rail industry. They felt that harassment and intimidation were commonplace, and were used to pressure employees to not report an injury, to cut corners and to work faster."

It is common practice today for railroads to implement a "team" approach for injury reporting. Under this policy, teams of workers are rewarded (or penalized) for no injury reports in a given time period. Therefore, not only does one face pressure directly from his or her employer, but also from a system designed to encourage fellow employees from ignoring injuries that need medical attention and from reporting safety concerns that should be addressed. Such tactics are precisely why "performance standards" cannot work.

A cornerstone of any rail safety legislation must be strong whistleblower protections. We must ensure that workers who report or identify a safety or security risk will not face retribution or retaliation from their employers. One should not have to choose between doing the right thing on safety and security and their job. Since 9/11, front-line workers have been asked to be more vigilant about security risks and to report possible breaches (without the benefit of appropriate training as I will address later). It is disingenuous for the railroads to ask workers to report problems and at the same time refuse to provide them basic protections needed to ensure that such reporting will not result in retribution. Congress has already passed strong whistleblower protection for the financial industry in the Sarbanes-Oxley Act. Surely, if we can protect those who report financial security problems, we can also protect those who report rail safety concerns.

I would note that several unions are participating in a pilot project with the FRA called Close Calls. This endeavor will hopefully generate new safety data which in turn will result in improved safety. Like anonymous reporting in the aviation industry, Close Calls will enable employees to self report events that do not result in a reportable accident, but could have major safety ramifications. The system is entirely confidential and the employee is exempt from discipline and retaliation by the company. This pilot project is just getting off the ground, but we are hopeful and have every expectation that it will make a significant contribution to improved safety.

We also continue to believe that a nationwide telephone notification system would enhance public safety and improve the integrity of our rail system. A 1-800-type system would enable members of the public to report grade crossing signal malfunctions, derailments or other events that affect safety and security on railroad properties.

Staffing and Training

Industry leaders will tell you all about their railroads' extensive training programs and detailed security plans. Let me tell you what rail workers – the workers who move trains, fix track, maintain grade crossing signals, repair train cars and work on-board – are telling me. I hear first hand about an overworked, understaffed workforce that is ill-equipped to manage the capacity crunch facing our railroad system. This is an industry that is making record profits, yet is unwilling to hire and adequately train the necessary workforce to handle the traffic[1]. The freight rail carriers transport more than 42 percent of our nation's domestic intercity freight on more than 200,000 miles of rail. Over the next five years, the railroad industry will need to hire 80,000 more workers just to maintain the current movement of freight.

[1] According to the industry's own financial reports, the nation's largest railroads report 2006 net income of $1.89 billion for Burlington Northern Santa Fe Corp., $1 61 billion for Union Pacific, $1 5 billion for Norfolk Southern Corp., and $1.31 billion for CSX Corp.

New hires have not kept pace with retirements in our aging workforce. As a result, new hires are commonly steered through shortened, one-size-fits-all training programs. Despite the hype you will hear about new state-of-the art training centers, our members continue to be frustrated by inadequate training programs. We know from reports in the field and exit interviews that new employees are resigning and leaving the industry because they are dissatisfied with the quality of their training, uncertain of their skills and uncomfortable with what they are asked to do with limited support.

As rail workers retire, we are losing critical "institutional" knowledge of the industry that in the past was passed along to new hires. In all of the crafts, a majority of the actual day to day training comes from more senior employees. The average age of railroad employees is well over 40. The end result of this exodus is that we have many workers with less than five years experience replacing workers with 30 plus years of experience which is hardly a recipe for safe and stable operations.

Training, both for new hires and recurrent training for existing employees, must be the foundation of any federal safety program. The FRA should have a rule on minimum training standards as well as methods to ensure that training programs are appropriate and effective.

It is clear that the bottom line drives the decisions of the rail industry even when safety is directly implicated. To that end, we are wary of the trend to contract out signal work, train and engine maintenance and similar work that has historically been done by railroad-specific crafts. At a minimum, we believe that Congress has a responsibility to examine the safety consequences of this practice.

Claims by the industry of security training cannot go unchallenged. Let me be clear, workers are not receiving meaningful security training. More than five years after 9/11 workers still do not know what constitutes a security risk, though they are told to be "vigilant." They do not know how to respond when they see someone or something suspicious and they certainly do not know what to do if something actually happens. Workers do not know what their responsibilities are or even what it means when the national threat level is elevated.

We have come to the conclusion that the only way workers are going to get the security training they need is for the federal government to come in and tell the carriers that they must offer this training because it is far too important to ignore. Producing a brief video on security does not constitute training.

A corollary issue to training is certification. To ensure accountability for the safe operation and maintenance of railroad equipment and facilities, a certification program needs to be put into place for personnel with safety-sensitive responsibilities, including carmen, conductors, mechanics, signalmen and track inspectors. Furthermore, any train that carries hazardous material should be staffed by workers certified in hazard identification, health effects and first response. Such training and certification should obviously also apply to emergency and first responders such as track and signal employees.

Fatigue

Madam Chair, I know you are planning specific hearings to address the issue of fatigue in the rail industry. While we will offer a more detailed account of this problem at that time, let me make a few comments today about this growing problem. It is no secret that rail workers are being asked to do more and more with fewer resources and less sleep. More freight is being moved with fewer employees than at any time in the history of railroading. Add to the mix the continuing threats of terrorism in this post 9/11 world and we should all be concerned. Fatigue is a reality in this industry and is clearly a contributing factor in many accidents and incidents. It doesn't have to be this way. With cooperation, fatigue issues can be addressed. A more thoughtful and balanced approach to fatigue management will result in a more rested, better prepared and ultimately more efficient workforce.

Unfortunately, our nation's railroads are demanding that workers work more hours and to come to work tired or face reprisals. In the tragic train collision in Macdona, Texas where a hazmat release resulted in three deaths, the employee involved had requested a day off for rest. The employee was permitted to be off one day, but was unexpectedly called for duty about midnight that day with two hours of sleep. He knew he could lose his job if he refused to report for work. That is just not right and this Committee has a chance to do something about this chronic problem.

The NTSB has identified fatigue as one of the most serious safety issues affecting the railroad industry and has noted that safety sensitive rail employees can be required to work in excess of 400 hours in a 30 day period. Despite record profits, railroads are operating at maximum capacity without sufficient manpower and are instead relying on an understaffed, overworked and chronically fatigued workforce.

Furthermore, scheduling continues to be a major problem for railroads and their employees. Unless employees know in advance what time they must report to work, they cannot properly prepare with adequate rest. Our railroads operate on a continuous schedule, 24 hours a day, 7 days a week from coast to coast. Rail workers do not have typical 9 to 5 work hours. However, with the technology available today there is no reason why every rail worker cannot know his or her schedule in advance and be able to plan (i.e., rest, family time, personal time, commute time, etc.) accordingly.

Each rail carrier has an information delivery system which is commonly referred to as a "lineup" that is used to advise crews who are subject to call 24/7 regarding their status. Our members constantly complain of problems with these "lineups." It is absolutely essential that employees have early and reliable information about the date and time when they will be required to report for duty.

We would hope that this Subcommittee will immediately review the Hours of Service statute as it relates to railroad workers and address the issue of "limbo time." Limbo time refers to the time consumed between completion of the maximum allowable 12 hour shift and the time when an employee is completely released from service. The railroads have taken advantage of an erroneous interpretation of the hours of service regulations and now regularly compel crews to

remain at the work place to guard stationary trains until a relief crew is available for service. This "relieved but not released" status means workers are forced to remain on duty for hours and hours after completing a 12 hour shift. An 18 hour day is not unusual. To add insult to injury, after completing an 18 or 20 hour day crews are entitled to be off duty only 10 hours before they can be required to report for another 18 hour shift. Limbo time must be eliminated.

For signal workers, the manipulation of hours of service has become commonplace. While the 12 hour law applies to signal employees, there is an exception that allows employees to work up to four additional hours "when an 'actual emergency' exists and the work of the employee is related to the emergency." Railroads have exploited this exception to the extent that now almost all signal work is classified as an emergency. Signal employees routinely work 16 hour days.

When the Hours of Service (HOS) Act was expanded to include signalmen in 1976, it was intended to be a 12 hour law. And, it should be noted, that is how the railroads originally applied the law. If, for example, signal personnel were working on a signal problem and were approaching the 12 hour work limit they would inform their supervisor and the supervisor would make a decision if the individual would finish the work within the time limit, or if another employee would be called to finish the repair work. However, through gradual "creep" by the railroads the law has become a 16 hour law. Signal employees today are instructed to work up until the 16 hour limit before they call for any relief personnel. In some cases, the railroads authorize outright violation of the HOS Act and order their signal employees to continue working until they are finished with the repair work.

Of greater concern, is that employees can be required to work 20 hours in a 24 hour period without adequate rest. Let me illustrate a typical duty time example for you: On Sunday evening a signalman goes to sleep at 9:00 p.m. and awakens at 5:00 a.m. to arrive for his regular Monday shift of 7:00 a.m. to 3:30 p.m. Under current law, at 3:30 p.m. his "rest" period starts. At 11:30 p.m. he is considered fully rested and a new 24 hour clock begins, despite the fact that he may have just gone to sleep at 10:00 p.m. After less than two hours of sleep he then receives a call to work at 12:00 a.m. on Tuesday. He works four additional hours and is finished with the trouble call at 4:00 a.m. He then travels home and has to return for his regular shift at 7:00 a.m. The cumulative effect of the law on the individual is that he is allowed to work a total of 20 hours of service within a 32 hour period without rest. You can imagine the situation exacerbated further when the railroads tack on their additional four "emergency" hours. The HOS Act should be amended to require that employees performing signal work receive at least 8 hours of rest during a 24 hour period.

Adequately addressing the fatigue issue will require collaboration and cooperation as do all human factor issues in our industry. Having said that, we are committed to finding solutions to make our railroad safer and believe that there are several common-sense fixes that can be addressed immediately. For example, the provision in the Hours of Service Act which allows railroads to locate sleeping quarters in the yards if they were built before 1976 should be eliminated. The quality of sleep is as important as the amount of sleep, and it should be obvious that an individual who is sleeping in a train yard will not be well rested. Furthermore, guaranteed time off and shortened work days will result in better rested, better prepared and more efficient employees.

Last year Administrator Boardman presented this Committee with a Collision Analysis Report which was the result of a working group between the FRA, rail labor and rail management. The collaborative effort produced a result that showed that fatigue is a contributing factor in many train collisions. Rail management participated in the analysis as an equal partner, but they ultimately withdrew their names from the final report. We are pleased that the FRA published this significant work and we pledge to continue working in cooperation with any parties that are committed to improving rail safety.

Track Safety

Madam Chair, we anticipate that your rail safety agenda will include a myriad of changes to improve track safety and the safety of rail workers and communities. Of the many improvements related to track safety that are of concern to rail labor, let me mention just a few today.

Non-signaled, or "dark territory" refers to movement of trains over track without signals. Trains run through dark territory under the direction of a dispatcher but without the safety redundancies of switch monitors, block protection, or broken rail detection. Signal systems are affordable, relatively low-tech technologies that save lives. Unfortunately, the rail industry routinely fails to properly maintain signal systems and in fact often petitions the FRA to waive signal requirements for large areas of track.

The tragedy in Graniteville, South Carolina occurred in dark territory. A basic signal system would have noted that the hand-thrown switch was not properly lined and the train would have had a red signal to stop. Nine people died in Graniteville (including the train engineer who was not properly trained in hazmat evacuation procedures). Signal systems save lives when they are present and maintained properly. Rail labor is adamant that petitions to remove signal systems and increase dark territory in our rail system be rejected.

Technological advances are important tools in creating a safer rail network. Rail labor has welcomed and adapted to technological changes over the years. The implementation of positive train control (PTC) systems is on the NTSB's most wanted list of transportation safety improvements. Rail labor has partnered with the FRA and others through the Railroad Safety Advisory Committee (RSAC) process to address PTC in order to prevent train collisions and over-speed accidents. We have been very supportive of developments in this area.

However, notwithstanding technological advancements, including PTC, we oppose single person operation of rail locomotives. The responsibilities of a railroad to operate safely over public crossings, to inspect the moving train, to open public crossings quickly when stopped, and to interact with emergency responders as situations warrant cannot be address by PTC, and were not designed to do so. Railroads that are intent on operating trains with a single individual are ignoring their responsibility to their employees, local communities, local emergency responders and the general public.

As new technologies emerge, we must remain vigilant that technology does not replace human oversight. A qualified, well-trained and adequately staffed inspector workforce is critical to the safety or our nation's rails. To that end, rail labor notes that the current level of staffing at the

FRA is woefully inadequate. Currently each FRA track inspector is responsible for over 500 miles of track. Current regulations call for a minimum of two track inspections a week. Understanding that track inspection is time-consuming, labor-intensive work it is impossible to expect the current inspector workforce to actually inspect all of the lines they are tasked to oversee. More inspectors not only will increase the safety of our railroads, but an increased presence on the railroads will have the added benefit of discouraging trespassers and those intent on creating havoc on the railroad.

Accountability and Enforcement

Even the most robust safety rules are meaningless if not fully enforced by federal regulators charged by Congress with this task. Yet we know that the railroads have used their considerable political clout to limit enforcement activities and oversight and in reality face little consequence for safety infractions. Fines, when they are levied at all, are little more than nuisances to multi-billion dollar rail companies. Congress must step in to make rail carriers that violate safety regulations accountable for their actions. Fines should be increased exponentially and penalties should more adequately reflect the level or number of infractions by a carrier.

UP Waiver

Before I close, I want to comment on a recent effort by Union Pacific (UP) to obtain a waiver from safety rules to allow trains to travel from Mexico into the interior of the U.S. My understanding is that faced with stiff opposition from Members of Congress, transportation labor and other safety advocates, UP has decided to withdraw this request. While we are pleased with this latest development, the fact that UP even attempted to circumvent common-sense safety and security measures is astounding. I doubt that we have seen the last of this issue. As this Committee is aware, the FRA denied a similar UP waiver application in 2004 citing the fact that the Government of Mexico did not enforce "equivalent or comparable standards" to those required in the U.S. A number of members of this Committee formally opposed that effort and I want to thank you again for insisting that safety rules that are in place are not needlessly discarded.

The border inspections currently performed by U.S. rail workers play an important role in ensuring the safe and secure movement of cross-border operations and UP's request was a significant departure from established rules. We hope that this Subcommittee will assist with the oversight of these types of waivers and oppose efforts to weaken safety rules.

Conclusion

Madam Chair, let me thank you again for inviting us to testify this afternoon and for your commitment to advancing a robust rail safety agenda. The safety of rail workers and the public has been compromised for too long. We look forward to starting a new tradition under your stewardship – a tradition where workers matter, where safety and security are paramount, and where integrity, cooperation and corporate responsibility outweigh profits and payouts for stockholders. We are anxious to get to work to help move a strong rail safety agenda.

The safety and security association of the commercial explosives industry • Founded 1913

February 15, 2007

The Honorable Corrine Brown
Chairman
Subcommittee on Railroads, Pipelines, and Hazardous Materials
Committee on Transportation & Infrastructure
US House of Representatives
Washington, DC 20515

RE: Statement for the Hearing Record
"Reauthorization of the Federal Rail Safety Program"

Dear Madam Chairman:

I am writing on behalf of the Institute of Makers of Explosives (IME). We appreciate your interest in issues critical to ensure the safety and continued viability of rail transportation as a preferred mode of hazardous materials transportation. We request that a copy of this statement be placed in the record of the Subcommittee's hearing held January 31, 2007.

Interest of the IME

The IME is the safety and security association of the commercial explosives industry. Our mission is to promote safety and the protection of employees, users, the public and the environment; and to encourage the adoption of uniform rules and regulations in the manufacture, transportation, storage, handling, use and disposal of explosive materials used in blasting and other essential operations. Commercial explosives are transported and used in every state. Additionally, our products are distributed worldwide, while some explosives, like TNT, must be imported because they are no longer manufactured commercially in the United States. The ability to transport and distribute these products safely and securely is critical to this industry.

IME's member companies will be directly affected by the willingness and ability of rail carriers to deliver chemical feedstocks and explosive precursors which are key to explosive manufacturing. Anhydrous ammonia is a key constituent in ammonium nitrate which is essential for the manufacture of approximately 98 percent of the commercial explosives used annually in the United States. We are the shippers and, in some cases, the receivers of finished explosive products. Explosive precursors tend to be delivered by rail and finished product shipped by truck.

Points for Consideration

- "Industry" Representation: Transportation security, including freight rail, consists of three critical components: the infrastructure itself, the freight or cargo being carried and the vehicles carrying the cargo. The only "industry" views presented at the January 31st hearing were those of the rail carriers themselves. While "shippers" (who own, lease and operate the railcars that move and receive hazardous materials) and railcar manufacturers do not speak for the

railroads, they likewise do not represent our interests. We would welcome a place at the table as issues directly related to our business operations are discussed. Yet, such opportunity is seldom provided, either by Congress or the administration, as efforts to better understand and take responsible steps to address issues related to the rail transportation of hazardous materials are considered.

- Probability of an Accident: While a zero-accident transportation system is a laudable goal, the only way to ensure that tank cars are accident-free is not to transport them. The reality is that accidents will happen, including accidents involving tank cars. Yet, the reality is also that the safest mode of transportation is rail, and that the economy would suffer unacceptable disruption if this mode of transportation were allowed to refuse to carry hazardous materials, even if only the subset of TIH materials, in rail cars.

- Product Embargos: We are very concerned by statements of the railroads that they would welcome the opportunity to be relieved of their common carrier obligation to move certain types of hazardous materials or that shippers should make "safer" products. These statements are very disturbing and short-sighted, given the realties of our transportation options and our economy. Yet, the threat of product embargos is very real. You may remember the ill-fated 2003 effort by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) to regulate persons who transport explosives under Federal Explosives Law (FEL) which prompted a self-imposed embargo of explosives shipments by all North American railroads, vessel operators serving U.S. ports, and some motor carriers. The embargo was disastrous for explosives industries left without means to effectively transport products. However, Class 1 materials make up less that one percent of all hazmat freight and it was simply not in the economic interest of commercial carriers to revamp their personnel screening requirements to the extent necessary to comply with FEL for the incremental business provided by explosives shippers. ATF's effort was blocked when the US Department of Transportation (DOT) and the Transportation Security Administration (TSA) issued rules addressing security qualifications of hazardous materials transportation workers effecting a provision of FEL that exempts the applicability of the statute from aspects of transportation regulated by DOT or DHS. While DOT/TSA's action prompted a lifting of the voluntary embargo, we understand that Canadian railroads still embargo explosives shipments in the United States.

  The ramifications for the economy and society if railroads are relieved of their common carrier obligation is unacceptable. Not even the railroads would be immune as these materials are indispensable precursors to rail infrastructure and equipment as well as the well-being of rail employees. It is a paramount concern of shippers that the response to current perceptions of tank car safety and liability not be requirements or standards so severe or unique that railroads are relieved of their common carrier obligation to transport or that shippers find themselves unable to offer to railroads essential materials.

- Comprehensive Review: To determine how best to improve the railroads already exceptional safety record, many are advocating for a "comprehensive" or "holistic" review of safety considerations surrounding the tank car movement of hazardous materials. Since catastrophic failures of tank cars are the consequence of derailments, collisions and human error, any improvements to tank car specifications will likely be eroded without corresponding improvements to rail track, operating procedures, and personnel training. IME also believes that an assessment involving all these factors is essential. In addition, shippers use all modes of transportation and multiple modes to move some shipments. Therefore, any "comprehensive" review must look beyond the immediate rail environment and embrace an intermodal approach that is system-wide in scope. Otherwise, the result is likely to simply be a shift of risk to other modes.

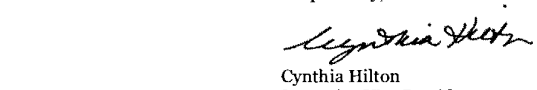
Several years ago, the US Coast Guard (USCG) enforced policies that made it virtually impossible to bring shipload quantities of explosives into U.S. ports. The premise for the policies was to keep port facilities "safe," and now we would add "secure." However, the "closure" of U.S. ports did not lessen the need for explosive products. The market demand resulted in ships being routed to Canada or Mexico where product was transferred to trucks and brought to customers in the United States. DOT led a multi-agency working group to assess the system-wide risks of the USCG's policy. In its final report, the working group "found that system-wide risks from such a course could be orders of magnitude higher than from allowing unloading in a port closer to the intended destination of the explosive cargo. This occurs because highway risk (crash and explosives transportation) more than offsets port risk if significant distances are involved."[1] It would be folly to advance policies that make rail transportation "safer" at the expense of system-wide safety.

- Impact to the Rail Industry: The railroad industry has made it crystal clear in testimony before your Subcommittee that railroad viability is threatened by seemingly limitless liability when accidents, for whatever cause, result in catastrophic releases of hazardous materials. Since many hazardous products are dependent on rail transportation, shippers cannot dismiss railroad concerns. All affected parties should be open to solutions outside traditional remedies which, at best, promise marginal improvements in safety. A suggested solution worthy of consideration includes working with Congress to create a statutory liability cap with government revenue and/or private-pooled funds covering damages above the cap. Such coverage is a way to limit risk and establish a level of certainty necessary to sustain a market for insurance.

Conclusion

IME is pleased that Congress has engaged this important issue. All parties to the discussion of railroad and tank car security should share common goals to foster safe, secure, reliable, and ecouomically-feasible rail transportation. Your leadership toward these objectives is welcome.

Respectfully,



Cynthia Hilton
Executive Vice President

cc: The Honorable Bill Shuster

[1] http://hazmat.dot.gov/riskmgmt/analyses/explo_transp_wp.pdf.

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